BICOL BIENNIAL EVALUATION

Bicol River Basin Development Program

AUGUST 1979

MANILA, PHILIPPINES

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GOP/BRBDP-USAID

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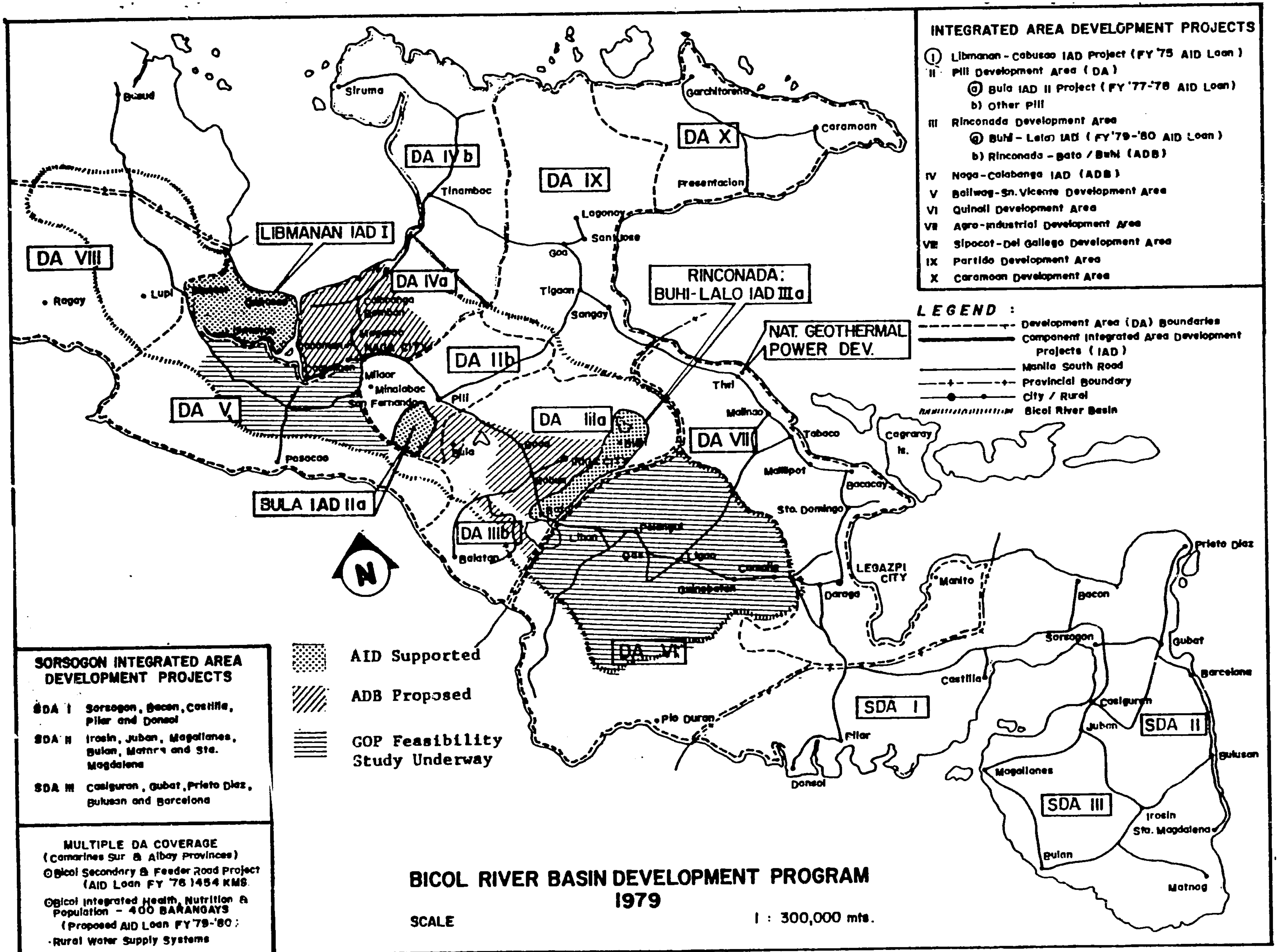
INTEGRATED AREA DEVELOPMENT PROJECTS
I Libmanan - Cabusao IAD Project (FY '75 AID Loan)
II Pili Development Area (DA)
a) Bula IAD II Project (FY '77-'78 AID Loan)
b) Other Pili
III Rinconada Development Area
a) Buhi - Lalo IAD (FY'79-'80 AID Loan)
b) Rinconada - Bato / Buhi (ADB)
IV Naga - Calabanga IAD (ADB)
V Baliwag - Sn. Vicente Development Area
VI Quinali Development Area
VII Agro-Industrial Development Area
VIII Sipocot - Del Gallego Development Area
IX Partido Development Area
X Caramoan Development Area
LEGEND :
Development Area (DA) Boundaries
Component Integrated Area Development Projects (IAD)
Manila South Road
Provincial Boundary
City / Rural
Bicol River Basin
Sagnay
Siruma
Garchitorena
Caramoan
DA X
DA IV b
DA IX
Presentacion
Tinambac
Lagonoy
San Jose
Goa
LIBMANAN IAD I
DA VIII
DA IVa
Tigaon
Sangay
RINCONADA: BUHI-LALO IAD IIIa
Ragay
Lupi
NAT. GEOTHERMAL POWER DEV.
DA IIb
Milaor
Minalabac
Pili
Tiwi
San Fernando
DA V
DA IIIa
Malinao
DA VII
Tabaco
Cagraray Is.
Bula
Pasacao
Malilipot
Bacacay
BULA IAD IIa
Sto. Domingo
DA IIIb
Ligao
Balatan
LEGAZPI CITY
Manito
Prieto Diaz
Camalig
Guinobatan
Daraga
Bacon
DA VI
Sorsogon
Gubat
AID Supported
ADB Proposed
GOP Feasibility Study Underway
Castilla
Barcelona
SORSOGON INTEGRATED AREA DEVELOPMENT PROJECTS
SDA I Sorsogon, Bacon, Castilla, Pilar and Donsol
SDA II Irosin, Juban, Magallanes, Bulan, Matnog and Sta. Magdalena
SDA III Casiguran, Gubat, Prieto Diaz, Bulusan and Barcelona
SDA I
Casiguran
SDA II
Pio Duran
Pilar
Juban
Bulusan
Donsol
Magallanes
SDA III
Irosin
Sta. Magdalena
Bulan
Matnog
MULTIPLE DA COVERAGE
(Camarines Sur & Albay Provinces)
Bicol Secondary & Feeder Road Project (AID Loan FY '76) 454 KMS.
Bicol Integrated Health, Nutrition & Population - 400 BARANGAYS (Proposed AID Loan FY '79-'80)
Rural Water Supply Systems
BICOL RIVER BASIN DEVELOPMENT PROGRAM
1979
SCALE 1 : 300,000 mts.

BICOL BIENNIAL EVALUATION TEAM[1/]

U. S. Members

Dr. Thomas T. Weaver
(U. of Rhode Island)

Dr. Gerald C. Wheelock
(Alabama A&M University)

Dr. James A. Roumasset
(University of Hawaii)

GOP Members

Dr. Gelia T. Castillo (UPLB)

Mr. Joaquin P. Cortez III
Planning Consultant

Mr. Rolando Tungpalan, NEDA

Mr. Danilo Alcantara, NCIAD

1/ See Attachment G for team resumes

ACKNOWLEDGEMENTS

The terms of the joint Bicol Integrated Rural Development Project (Bicol IRD) Agreement (Project No. 492-0303, Agreement No. 78-19, Art. 5, Sec. 5) calls for an evaluation of the GOP Bicol River Basin Development Program and the joint Bicol IRD support project not less than once every two years. This evaluation was undertaken to fulfill that agreement and assess progress and problem areas.

The evaluation was carried out with the cooperation of the Acting Program Director, Camilo A. Balisnomo, and members of his staff, plus Bicol line agency project managers and staff. The same is true for representatives of USAID. The team would also like to thank Mr. Teodoro Encarnacion, Deputy Minister, MPW, and Mr. Eduarto Corpuz, Assistant Director, NEDA, for valuable insights. Appreciations is also expressed to Mr. Francisco Balitaan, BRBDPO Evaluation Specialist.

It is the sincere desire of the joint evaluation team that the results of this evaluation will be useful to all parties committed to the goals of the greater Bicol River Basin Development Program; i.e., increased income, a more equitable distribution of income, and improved quality of life for Bicolanos. Each member of the evaluation team has been extremely privileged to have the opportunity to learn from one of Asia's better known integrated area development (IAD) programs.

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B. Creation of the BRBDP
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I SUMMARY FINDINGS AND RECOMMENDATIONS

The Bicol River Basin Development Program (BRBDP) was last evaluated by a joint GOP/U.S. team in 1977. It was also evaluated in 1975. The following report presents the findings of a follow-on 1979 evaluation by a joint GOP/U.S. sponsored team conducted over a period of six weeks. The evaluation team members reviewed project documents, visited the three-province Bicol Program area including individual project sites, and drove down many of the new project roads. Trips were made as far as the Irosin Valley in Sorsogon in search of information and confirmation of concepts. The team interviewed numerous participants and officials in both Manila and the Bicol. This evaluation differed from its predecessors by concentrating on the broader Bicol River Basin Development Program now in its sixth year as well as the supporting USAID grant technical assistance project.

Summary Findings

The team assessment of the joint Bicol Integrated Rural Development Project (Bicol IRD), indicated that it has been successful in providing selected U.S. and Filipino technical consultants, participant training to the U.S. and other Asian countries, and a moderate level of essential commodities (see Attachment F). The emphasis is now shifting from project planning/packaging to technical assistance in support of the implementation of the five on-going Bicol loan projects assisted by AID, agribusiness and rural industry promotion and project monitoring and evaluation activities. Activities are also proposed to facilitate spread effects from the Bicol Program to other IAD efforts in the Philippines.

As detailed in the main body of the report and its attachments, after originally attempting a comprehensive approach to regional development, the operations of the Bicol Program now focus on a package approach to development. In this approach, critical development bottlenecks in an area are identified, taking into account the expressed needs of the local population together with some knowledge of the available resources in the area. The identified bottlenecks are used to pinpoint a complementary set of component projects. The team found that this practice of packaging integrated component projects is fundamentally sound. It has been successful in attracting funding by external sources (see Attachment E). It can be further strengthened in a number of ways, and the team developed a number of recommendations which are presented in this report.

The evaluation team found that decentralization of appropriate planning, coordination and policy-making activity to the regional and sub-regional levels has been effective. When decentralization of the appropriate functions has been employed, local government and popular participation in the planning process is encouraged, Bicol Program Office staff are more productive, and the problem-solving capability of the Bicol Program is enhanced. The reverse is true under a more centralized process.

At the present stage of evolution of the Bicol Program, it would be premature to recommend transfer of the entire concept to other regions or sub-regions. Nevertheless, the potential for replicating the package planning and action strategies is immediate. However to achieve that potential, it seems necessary to fully operationalize the concept of decentralized planning and implementation.

In sum, the overall picture of the Bicol Program test case in Integrated Area Development is mixed. The evaluation two years ago saw reason for considerable optimism primarily on the basis of the Bicol River Basin Development Program Office (BRBDPO) having effectively planned and coordinated a variety of component projects. The promise of two years ago has not yet been achieved. In the interim, changes in personnel and operational approach have tended to mute the full BRBDPO coordinating and planning capacity. New projects recently funded will place pressure on training less experienced BRBDPO staff, and the momentum from yeoman efforts in earlier years may bring yet more projects to the Basin. The brief inspection of individual projects already underway suggests second generation problems ahead that will need priority attention. The very success in designing and funding projects seems to divert attention away from other key development problems which need to be solved if the benefits, particularly from irrigation projects, are to be achieved.

The evaluation team wishes the staff of the BRBDPO every possible success. They are engaged in a very crucial program. The nation is looking to it for guidance. It should not be allowed to be crushed on the rocks by its own momentum.

Recommendations

The main body of the report and its attachments develop a number of recommendations. These are presented here in summary form under the headings of (A) program direction, (B) agribusiness promotion, (C) management, research and training, and (D) organization, administration and staffing.

A. Program Direction

The focus on infrastructure development was an appropriate choice for the first generation of projects in the case of Bicol River Basin. In the first stage, the key was to get the integrated rural development apparatus moving and to achieve some initial successes and impacts. This is still true for project areas outside the physical river basin. The evaluation team feels that for the second generation of projects the focus should be somewhat different and perhaps slightly more narrow. In particular, the area of resource management, broadly understood, would appear to be a strong potential comparative advantage for the Bicol Program. Management of river basin resources includes hydroecology planning, agro-forestation, and water management. The resource management concept should also be extended to include coastal zone resource management and to the design and implementation of cropping systems for smallholders in the non-irrigated areas (e.g., the development and extension of a simple cover crop for coconut areas). Specifically, the team makes the following recommendations:

1. New component projects should be designed and existing plans reviewed in accordance with the principle of providing projects with the least disturbance to the physical-social-economic environment in place. In construction, this means investigating projects with lower capital-intensity. In institutional design, this means building on the strength of existing organizations and contractual arrangements rather than replacing them with fashionable, but unproven, systems imported from Manila or other countries.

2. Second generation projects in the Bicol Program area should include:

   a. agro-forestation
   b. coastal zone management
   c. perennial cropping systems for smallholders
   d. annual mixed cropping systems

Pilot efforts should be continued or initiated now in these areas to provide information and direction for future planning.

B. Agribusiness Promotion

In addition to BRBDPO resources, the Bicol IRD grant project provides resources for BRBDPO, NEDA Regional Office, and concerned line agencies to develop a collective regional agribusiness and rural-based industry strategy and action program to further stimulate a significant increase in private sector investment. Regarding the on-going agribusiness and rural industry promotion effort, the evaluation team makes the following recommendations:

1. Preliminary Bicol Program investment promotion activities have been largely concentrated on the preparation and promotion of pre-feasibility studies on agribusiness and/or agro-industrial projects. Considering that a rational investor will somehow have to undertake an investigation of the project using his own set of assumptions and policies, we believe that this activity is largely unnecessary. Instead, general area profiles depicting the available and abundant resources and business opportunites in the region may be prepared and widely disseminated. The preparation of brochures as general investment guides for interested investors now underway may prove to be more useful.

2. In the area of agribusiness promotion, the efforts of the BRBDPO can only complement the efforts of the private sector. With this in mind, the agribusiness program should focus on areas where private investment may be inhibited because of difficulties in obtaining the necessary information, designing and enforcing contracts, or coordinating investment efforts across enterprises and investors.

3. Recently, the agribusiness staff of the BRBDPO was chosen to serve as the technical secretariat to the Regional Council of Small and Medium Industries (RCSMI). We believe that with the full support of the BRBDPO, the RCSMI could effectively function as a strong coordinating body for private investment promotion and acceleration in the region.

C. Management, Research and Training

Some of the project designs appeared to be affected by engineering and planner bias. In particular, the Libmanan-Cabusao and Bula projects may have been unnecessarily sophisticated. In the future, it may be advisable to more thoroughly investigate cost-saving alternatives which deliver most of the benefits of the original design. Similarly, one should not overload projects with excess institutional baggage. Rather, one should build on the strengths of existing voluntary organizations and contractual arrangements.

The methods of data collection, project selection and monitoring should be streamlined so as to conform with the package approach. A comprehensive survey of the current economic situation is unnecessary, and studies which fully isolate the impacts of projects are impossible. Instead, more intensive data collection efforts are needed in the critical areas where Bicol Program intends to concentrate its efforts. Thus, for example, if irrigation is to be the focus, improved topological maps, hydrological information, and weather statistics should be made available. Similarly, the goals of project evaluation should be more modest. It is important to monitor the more narrow objectives of the projects in terms of the actual operations and in terms of directly related economic activity (e.g., cropping patterns, inputs and yields).

Another potential comparative advantage of the Bicol Program lies in research and extension. In this context, applied research is needed not only to develop appropriate production techniques, but to develop appropriate systems of resource management and appropriate modification of existing institutional structures. Extension is likewise understood to include the implementation of similar management systems and institutional adjustments. An independent center of research and extension activities should be built-up around the consortium of agencies concerned with agricultural research and the complex of research facilities, under the auspices of PCARR, at CSAC and BPI experiment station.1/ The proposed research group would be of additional utility at the planning and feasibility stages of project packaging. The following specific recommendations are developed in the text of the report:

1. Field trials should be continued in all IAD project areas by the line agencies concerned under the general coordination of the Bicol Agriculture and Resources Research Consortium and BRBDPO. Such trials should be used to establish the appropriate farm practices which ought to be adopted by farmers given current technology. Further, this effort should be coordinated with evaluation activities, e.g., BAEcon data generation and BRBDPO Farm Records Project for feedback to, and action decisions by, the Composite Management Groups (CMG's) and the Project Management Offices (PMO's) of the respective IAD (component) projects. Much of the machinery for this applied research is already in place. What is needed is the capacity to analyze this data with updated economic methods (incorporating stochastic weather variables and individualized shadow prices of labor and credit).

2. Immediate analysis should be carried out by the appropriate agencies to consolidate all available rice yield data from the region so as to establish reliable statistics on:

   a. irrigated dry and wet season yields
   b. rainfed dry and wet season yields

   These data should be analyzed with respect to:

   a. variability within agro-climatic areas in the Bicol
   b. variability between years within agro-climatic areas

1/ Philippine Council for Agricultural Resources and Research (PCARR); Camarines Sur Agricultural College (CSAC); and Bureau of Plant Industry (BPI). All are located in the vicinity of BRBDPO.

c. the potential of output growth based on increased inputs of irrigation, fertilizer, insecticides, and other indigenous, but potentially productive cultural practices. In addition to existing line agency and BRBDPO staff, highly experienced, senior Filipino consultants should be considered for funding under the Bicol IRD Project.

3. An expert hydrologist should be employed to do follow-up investigation on the soundness of assumptions incorporated in the basic project design, particularly for the lower basin. Adjustments could then be made to the benefit of the farmers who will benefit from the projects and who are being asked to pay for the projects through irrigation fees. The evaluation team understands that hydrologic data collection and analysis as well as the publishing of the results for the complete Bicol River Basin are scheduled to be upgraded. This is essential. The National Water Resources Council (NWRC) can play an active role.

4. U.S. and Filipino water management consultants with proven expertise in rice irrigation and in supplemental irrigation systems should be employed by early 1980. Such consultants would work with technicians of participating line agencies particularly NIA and the Bicol Agriculture and Resources Research Consortium to advise on and monitor the process of the irrigation systems. This would include establishing appropriate soil and water use management needed to gauge the efficiency of the systems.

5. Workshops should be held for project managers and staff and Bicol Program staff on irrigation rotational systems already in place elsewhere in the country, so that experience gained in these systems can be available to the Bicol. Proposed operational training (AID-supported) in another Asian country for the senior staff who will operate the major systems and local line agency staff would also be valuable.

6. Considering all the complexities, controversies and issues associated with rotational irrigation, the viability of irrigation associations, compact farms and Samahang Nayons, the design for institutional development deserves a serious second look before system-wide efforts to implement it get underway. The present design might have to be treated with less sanguinity that is now presently held.

7. Present national policy on irrigation repayment calls for repayment to cover capital expenses and operation and maintenance costs. A fundamental ambiguity in the policy exists, however, according to which farmers who are unable to pay will not be forced to. This introduces a great deal of discretion into the collection procedure. This ambiguity should leave room for the Bicol projects to experiment with a system under which farmers pay proportionately to potential benefits that could be received from irrigation. Potential benefits would be assessed independently for various classes of farmers according to topography, access to and reliability of the water, and economic characteristics of the farm family.

8. There should be a close examination of the land consolidation in the Bula IAD Project with a view to assessing the merits and demerits and the rationale of the entire approach. If land consolidation appears to place unnecessary burdens on many farmers, then the system should be redesigned rather than continue a commitment to a "pilot project."

9. BRBDPO participation in the Bicol Agriculture and Resources Research Consortium (BARRC) should be considered a priority activity as part of research coordination and a monitoring requirement for BRBDPO operations. Similarly, the BRBDPO should become intimately involved with the Soil and Water Management Research and Training Center. This should serve as a means of directing research efforts into problems encountered in project areas and in supplying a source of research results to BRBDPO planning staff and BRBDPO project coordinators. The BRBDPO should strongly support the involvement of UPLB, IRRI, PCARR, BAEcon, NIA, FSDC, MLGCD and others in the Basin research program through the Soil and Water Management and Research and Training Center.

D. Organization, Administration and Staffing

Based on extensive interviews, current operations of the BRBDPO appear to be unsettled and currently lack sufficient decentralization. In order to decentralize the planning and implementation of projects, the BRBCC should be re-established as the primary policy-making body. Increased funding and contracting authority for projects should be decentralized at the regional level (to project directors). The latter can be accomplished by giving the line agencies more autonomy and by relying more heavily on provincial and municipal offices as implementing bodies. Linkage to the ministerial levels to solve operational problems should be strengthened.

The evaluation team also feels that rebuilding the planning staff of the BRBDPO should be a priority activity. This restaffing should be carried out with a view to assembling the particular expertise required for the identified comparative advantage of the Bicol Program. Specific recommendations in the report include the following:

1. A permanent program director should carefully be selected and appointed following the guidelines of Presidential Decree 926.

2. Appropriate authority should be redelegated to deputy directors and decentralized within the Program Office itself, so that Bicol Program activities can be raised to the increased level of activity required by the increasing demands of accelerated project development, coordinated implementation, and monitoring/evaluation.

3. The role of the BRBCC as a coordinating and policy-making body should be fully restored. As the functions of the BRBCC are restricted, there is in turn less reason for the existence of a BRBDPO.

4. Restaffing should be carried out with a view to assembling the particular expertise that will be required for planning projects such as agro-forestation and mixed fishing/farming (as discussed above) which are within the identified comparative advantage of Bicol Program.

5. Full staffing of the planning section of the BRBDPO must proceed on a priority basis. A high level of capability is essential for planning second generation projects and for technically supervising and assessing the increased level of contractor documents and performance.

6. The BRBDPO should sponsor and coordinate seminar/workshops for BRBDPO professional staff and for the personnel of cooperating agencies to update them on latest research findings and other developments relevant to their planning, coordination, monitoring and evaluating functions. Such interagency meetings would provide a mechanism for discussion of project ideas and plans.

7. The BRBDPO should give all staff members the opportunity to visit and possibly work at project sites to gain first hand familiarity with operations.

8. A special depository for important Bicol Program documents be created to complement existing library facilities. Particular attention should be given to such things as maps and plans. Current maps should be made available to all participating agencies on a cost basis. A special index of all materials should be produced by the BRBDPO for public access.

9. The BRBDPO and national line agencies (with USAID assistance for other Asian countries and U.S. when appropriate) should invest in the training and general upgrading of line agency technical staff capabilities in agriculture and water resources development and related areas, because, in the ultimate analysis, project implementation anf farmer support are their responsibility.

10. Although active and quite effective to date, BRBDPO publicity efforts should be carefully designed and monitored to insure accuracy. Misunderstanding and unduly elevated expectations only add confusion and frustration. An updated, accurate, rhetoric-free framework plan capturing the essence of the Bicol Program would be an appropriate public information document.

11. A professional technical level document should be prepared and published on the Bicol Program and the component projects for distribution to Philippine institutions and professionals as well as international professionals involved in integrated area development.

12. In collaboration with NACIAD and NEDA technical staff, the BRBDP monitoring and coordination system for implementing projects should consider installing on an as-needed basis, a formal "special action report" system as backup documentation for the informal action reporting system, through both the lead-line agency MIS and through the Bicol Program vertical MIS. Additionally, the BRBDPO should consider implementing monthly summary progress reporting to the PAC, BRBCC, NACIAD and funding agencies. The exception reports should summarize the "Special Action Reports." The more detailed project status reports currently produced would be submitted quarterly or semi-annually.

13. It is suggested that a Management Committee be established under NACIAD, composed of the deputy or assistant ministers or assistant secretaries

of member agencies and the directors of all on-going major Integrated Area Development (IAD) programs/projects. It would likely be chaired by the chief operating officer of the council.

II EARLIER DEVELOPMENT EFFORTS IN THE BICOL REGION

Prior to the 1973 formation of the national ministerial level Bicol River Basin Council (BRBC) and the Bicol River Basin Development Program (BRBDP), there were some significant development efforts in the Bicol Region.

In 1959, confronted with the problem of credit collection, Jose C. Morano, then Regional Accountant of the Agricultural Credit Administration, developed a concept of compact farms and tried to concretize those in Borongborongan, Minalabac (Camarines Sur). The project, because of some difficulties, did not materialize. However, much later, Morano, who had now reinforced the compact farm concept with inspiration from the Israeli moshav-type of farm cooperative, reintroduced his ideas in an irrigated area in Inginan, Minalabac. This compact farm gave stress to production-marketing linkages.

That same year (1959), the Nueva Caceres Archdiocesan Secretariat for Social Action (ASSA) headed by Msgr. Jose T. Sanchez held a Congress at the Ateneo de Naga, to generate self-reliance among the parochial populations by lessening the farmer's stifling overdependence on the government for social upliftment. The Secretariat with the technical help of local bankers and businessmen evolved the concept of joint liability for production credit in compact farm units.

In July 1965, the Bicol Planning and Development Board (BPDB) was created by the President of the Republic under Executive Order 159. This was subsequently followed by Republic Act No. 4690 (C.1966) establishing the Bicol Development Company (BIDECO) which aimed to "promote the balanced and accelerated growth of the Bicol Region within the context of national plans and policies for social and economic development through the leadership, guidance and support of the government." The BIDECO appears to have almost petered out of existence without any sign of accomplishment, while the BPDB among other things, was able to conduct a survey of the resources of the Bicol Region as a foundation for the preparation of a regional development plan. Many of the plans and some of the personnel of the BPDB were absorbed by the BRBDPO and by the regional office of NEDA.

In early 1970, the Archdiocesan Secretariat for Social Action collaborated with Morano in developing compact farms in Inginan partly following the concept which involves grouping adjacent neighbors together and making them jointly liable for their production loans. About ten groups were initially formed.

In October 1970, Typhoon Sining swept over the Bicol Region causing massive destruction to both life and property. Modest developments in compact farming in Inginan were overturned.

In light of this calamity, concerned citizens in Camarines Sur, banded together under the leadership of the Archbishop, carried out rehabilitation work by means of the Food for Work Program with the Catholic Relief Services. Compact farms were also formed in Buhi, Naga, Bula, Pili, and Goa in Camarines Sur Province with the rural banking institutions giving massive capital support, an event unprecedented in the country's banking history.

Meanwhile, Bicol leaders set a series of conferences in Naga with representatives from the National Economic Council (now the National Economic and Development Authority), the Engineering Corps of the Armed Forces of the Philippines, and the United States Agency for International Development to solicit support for compact farm projects. Subsequently, in a meeting conducted in Manila, Secretary of Agriculture Arturo R. Tanco, Jr. and then Public Works Secretary David M. Consunji gave assurances of government support. An Interagency Bicol River Basin Team headed by Dr. Ramon Nasol, Dean of the Center for Regional Studies at University of the Philippines in Los Banos, was formed to study the problems of Bicol and submit appropriate recommendations. USAID assistance was led by Douglas Tinsler with the support of Frank Sheppard, USAID/Ag and Director Thomas Niblock. By September 1972 the study, Report on the Province of Camarines Sur and Lower Bicol River Basin, popularly known as the "Green Book," was submitted. This study was further refined by the GOP and presented by Secretary Tanco before the Consultative Group in Paris in October 1972. USAID signified interest in funding Bicol grant technical support and capital loan projects adopting the Integrated Area Development (IAD) approach to rural development.

An expanded study was drawn up in February 1973 by fifty technical personnel representing fifteen national and Bicol Region agencies and a private consulting firm. This study was supported by USAID. The output, Bicol River Basin Development Program, Framework Plan, was to be popularly known as the "Blue Book."

III THE BRBDP DEVELOPMENT MODEL - ITS ORGANIZATIONAL EVOLUTION AND LESSONS

Given the nature of the organization of the various offices of government, the following constraints and problems to effective development administration had been identified by 1973:

1. the difficulty encountered by line agencies in planning and implementing projects aimed to spur development which is multi-dimensional in concept within a defined action area and area of influence;

2. the difficulty encountered by a line agency involved in a project where the synchronized inputs from other line agencies are necessary for the completion of the total project package; and

3. the lack of local perceptions and area specific data (e.g., agro-climatic, hydrological, etc.) used for problem definition and identification that could eventually influence project development.

In response to these contraints and problems, the primarily national level Bicol River Basin Council (BRBC) was created under Executive Order 412. Its main role was to provide coordinated leadership and rational direction to the developmental undertakings within the Bicol River Basin by supporting plans and feasibility studies for domestic and foreign financing. The Bicol River Basin Council (BRBC) constituted a Board of Directors with eight (8) members. The Secretary of Public Works, Transportation and Communication (David M. Consunji) was Chairman with the following members: Director General, NEDA; Secretary, DOA; Secretary, DLGCD; Secretary, DAR; Secretary, DNR; Governor, Camarines Sur; and Executive Director, BRBC-Program Office.

A Program Office was constituted with an Executive Director, a Deputy Director-Physical Infrastructure Department (PID), a Deputy Director-Plans and Program Department (PPD), Deputy Director-Social Infrastructure Department (SID), and a Deputy Director-Administrative and Finance Department (AFD).

The BRBC was not able to effectively overcome the constraints because of (1) a heavily centralized planning and decision-making process, (2) lack of technical personnel, and (3) budgetary constraints.

1. Centralized Planning and Decision-making Process

Despite the formation of a field office (Program Office), the power and authority to negotiate and pay technical contracts, hire and organize staff, and make fund releases were vested in (1) the Program Chairman, (2) the technical staff in the Office of the BRBC Chairman, and (3) the the Operations Coordinator. As a result of the more centralized nature of management and planning (albeit effective up to a point) and due to the lack of an approved functional delineation between the office of the chairman and the Program Office for the operation of the program, much friction ensued between the decentralized Program Office and the Office of the BRBC Chairman.

2. Lack of Technical Personnel

The Bicol Program Office had to draw key personnel from the regional offices of the Department (now Ministry) of Agrairan Reform, the National Irrigation Administration and the University of Nueva Caceres. There were people recruited from the respective service-connected agencies. The three deputies, SID, PID, and AFD, were concurrently Regional Directors for DAR and NIA and the Chief Accountant of NEDA. The unsatisfactory personnel situation had been partly caused by the centralized structure whereby decisions on recruitment was a Manila Office prerogative. On the other hand, many competent, short-term people were assigned to assist the Bicol Program in the early years. Many continued with the program which constituted a competent core group.

3. Budgetary Constraints

Difficulties in budget releases were rampant. NEDA releases and line agency commitments were coursed through NEDA. Delays in the release of BRBC's budget affected operations and caused major delays of many activities. Budget releases for planning and design activities were the major constraint being experienced by the BRBC organization.

Despite the constraints, the BRBC continued the task of institution building. The notable contribution of BRBC was the formation of a Management Council, composed of the regional directors of concerned line agencies operating in the area, and the Private Advisory Council, representing the private sector. Moreover, moves towards the coordination of sectoral activities were started. Much of the BRBC's activities focused on the generation of field data to be used for planning and project development. The Social Survey and Research Unit headed by the late Frank Lynch, S.J. (IPC-Ateneo de Manila) was contracted with GOP and USAID funds to generate planning data for the Program Office. Two major feasibility studies (Bicol Roads and the Libmanan-Cabusao Projects) were also completed.

The aforementioned problems were recognized by the Government, and on April 26, 1976, Presidential Decree 926 abolished the BRBC and created the Bicol River Basin Development Program (BRBDP). This decree spelled out specific guidelines which enhanced a move towards real decentralization. First, a line budget was established with the Budget Commission solely for BRBDP operations. Second, the IAD approach to rural development was adopted. Third, a clear policy was spelled out for management and planning of the Basin area: it was to be comprehensive, decentralized and framed within regional and national plans.

The decree likewise created the Bicol River Basin Development Program Office (BRBDPO) to be under the supervision of the Cabinet Coordinating Committee-Integrated Rural Development Projects (CCC-IRDP) through a Cabinet Coordinator (Department, now Ministry of Public Works). It also specified that the BRBDPO was to be located in Camarines Sur Province. A Manila liaison office under the program office was also created for the purpose of soliciting support and facilitating coordination with the various national line agencies located in Manila.

At the program area level, the decree also created the Bicol River Basin Coordinating Committee (BRBCC) to serve as the policy-making and coordinating body. The BRBCC is chaired by the Program Director of BRBDPO with the NEDA Regional Executive Director as Vice-Chairman. Members of the council include the Governors of Albay, Camarines Sur and Sorsogon (the latter added under PD 1553, issued June 11, 1978) and the Regional Directors (or their duly appointed representatives) of the various line agencies operating in the program area. According to several officials interviewed, the BRBCC, until recently, was highly active and interactive in coordinating the various activities of different line agencies in project areas where line agencies are required to implement their respective project components.

The organizational structure of the BRBDPO includes planning and monitoring and coordinating departments. A mechanism for citizen participation in project identification, development, review and policy was developed through the Area Development Teams (ADT's) and Area Development Councils (ADC's) at the project level and the BRBCC and Private Advisory Council (PAC) at the program area level.

These elements of the Bicol program structure seem to have been working well. Difficulties encountered at the project level were being resolved. The BRBCC members felt they were actively involved in the development process. There was considerable momentum within the Bicol Program Office. The staff and its leadership had been given the responsibility for directing the development process in the Bicol area and they were responding with enthusiasm and commitment. Output accomplishments in data generation, feasibility studies and the first four capital projects were a reflection of this atmosphere.

The causes for what seemed to have been a viable IAD organization were the (1) decentralized structure for decision-making, coordination and problem-solving, (2) purposeful and competent leadership environment that then existed in the BRBDPO, (3) support the Program Office enjoyed from the Cabinet Coordinator with minimal, advance approval from above in terms of management decisions, (4) popular support that (1) and (2) were able to generate, and (5) foreign and local funding for the feasible projects that were designed.

More recently, the BRBDP organization has again been undergoing changes. The creation of the Office of the Cabinet Coordinator and the reshuffling of the Program Office has had the perhaps unintended effect of what appears to be a move toward recentralization. Decision-making authority now seems to emanate more from Manila according to the perception of many persons involved in the Bicol. The mission of the BRBCC has been reportedly changed from that of coordination and policy-making to that of an advisory body. It is likely that the proposed realignment will affect the capability of the BRBDPO to operate in a decentralized manner.

It is the assessment of the evaluation team that the Program Office has reached a critical low in terms of senior technical staff capability although there are knowledgeable younger staff that can be developed. It has become apparent to the team that the Program Director plays a highly critical role in coordinating, integrating and soliciting the cooperation of various line agencies and local groups. He must have a good managerial grasp to build around him a group of competent deputies and section leaders who function with delegated authority.

The operationalization of an IAD organization is a complex task requiring technically competent group of leaders who must exercise sound political judgement in dealing with the directives of Philippine government bureaucracy at the national, regional and local levels. Organizing for IAD operation likewise requires a good technical and legal grasp of the IAD concept and the corresponding abilities to interpret and apply the IAD concept given the parameters of socio-cultural, economic and political realities existing in the area, as well as the techno-political relationships operating among and within government agencies.

Ultimately, the effectiveness of the Bicol Program Office will have to be judged on how and to what extent the program has an impact on the lives of the intended beneficiaries, not on the number of funded projects. The cost and number are only relative input and output indicators of the investment process. The Program Office was set up as a means, not as an end in itself.

Based on these considerations, the evaluation team recommends:

1. That a permanent program director be carefully selected and appointed following the guidelines of Presidential Decree 926.

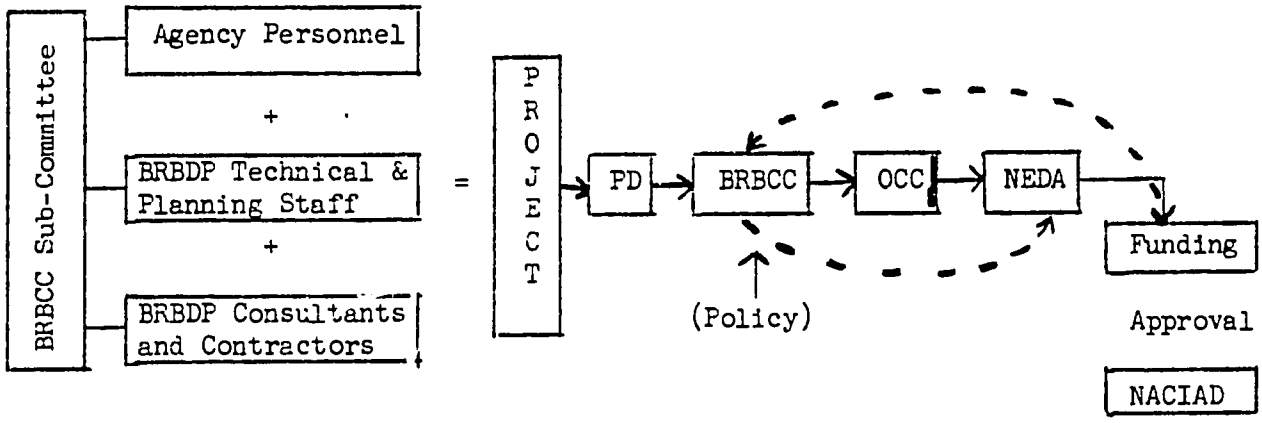
2. That appropriate authority be redelegated to deputy directors and decentralized within the Program Office itself, so that Program Office activities can be raised to the increased level of activity required by the increasing demands of accelerated project development, coordinated implementation, and monitoring/evaluation.

Decentralization of Authority in the Bicol IAD Area

The pivotal question on decentralization focuses on the exercise of central authority in Manila and field authority in the Bicol. Operationally, this requires a determination on what functions are most effectively carried out in the Bicol and Manila offices. "Effective" here refers to accomplishing most expeditiously those tasks necessary to achieve the overall development goals of the Bicol River Basin Development Program.

One of the policies formulated for the BRBDP under Presidential Decree 926 was the use of the BRBCC (see page 12) as a mechanism for regional line agency involvement and popular participation (through the provincial governors) in the projects and programs of the Bicol Program. Monthly meetings of the BRBCC served several purposes: (1) BRBCC members could be kept informed of programs and projects; (2) the BRBCC could receive reports of difficulties in project implementation and search for regional solutions which may in fact require cooperation between BRBCC members; (3) the BRBCC could act to assist in forming BRBDP policy; and (4) the BRBCC members could comment on project proposals and plans and comment on the roles assigned to them before the projects were submitted to higher authority.

This last activity, which gave the BRBCC a role in the planning process, seemed to be a very important one. It served to develop a sense of project commitment by the line agency directors, and it gave the provincial governors opportunity to speak for the people they were representing. This activity diagrammed below shows the progress of the project proposal outlined by



solid arrows. Recently, there has been a modification in the process. Project proposals are not necessarily passed through the BRBCC but rather BRBCC members are informed after the fact that the project has been sent ahead. This is indicated by the broken line in the diagram.

It is quite predictable that limiting the role of the BRBCC in the planning process would mean a loss of agency commitment, cooperation and integration and a reduction in representative participation.

We therefore recommend that the role of the BRBCC as a coordinating and policy-making body be fully restored. As the functions of the BRBCC are restricted, there is in turn less reason for the existence of a BRBDPO.

Another manifestation of recentralization of decision-making authority has been the recently restricted authority of the program director in matters concerning personnel appointment and in dealing with line agencies above the regional level as part of a problem-solving and BRBDP-project-promoting role. These are important in assessing the overall effectiveness of the BRBDP concept.

IV THE BRBDP PROJECT PROCESS

The process of project identification in the greater Bicol River Basin Development Program area has been changing. Two of the first three Bicol projects were initially identified by line agencies prior to the formation of the BRBDP. The third was identified by a Bicol Program interagency task group chaired by the concerned line agency. The availability of these proposals enabled the BRBDPO and interagency staff to move rapidly into project design and packaging.

Beginning in 1975, project selection for the Bicol Program and local government units became more structured. Municipalities in the Bicol Program target area began developing socio-economic profiles. The enumerators for these surveys came from provincial and municipal governments and line agencies. They were trained by BRBDPO staff. They essentially provided benchmark and planning data.

The socio-economic profiles were used along with other documents by the BRBDPO planning staff for developing a framework plan for each component IAD. The framework plan included a general statement of goals (e.g., increased rice production) and instruments (e.g., citing the need for flood control, roads, markets, irrigation, etc.) without specifying the exact location and specific hectarages involved.

The framework plans were sent back to the interagency Area Development Teams (ADT's) at the municipal levels who were then to make the objectives more specific (e.g., increase per hectare production from 40 to 80 cavans). Specific projects were singled out which were compatible with the framework plan. For example, a possible irrigation project would be identified including the source of water and the rough estimate of the communal area. In this way, the comprehensive plan would comprise a shopping list of possible projects for the Bicol Program and other government programs. Provincial and municipal inputs along with line agency proposals became part of the plans.

The next step was to send the comprehensive plan back to the planning group of the BRBDPO. The planning group would develop a preliminary package of related projects in an IAD. Once the major preliminary project was identified, feasibility studies of the individual components were undertaken. On the basis of the feasibility studies, the package would be devised and proposed for funding. (For the first 5 projects including the component sectoral projects, USAID loans funded approximately half of the initial project cost estimates, including a substantial portion of local currency costs as well as direct foreign exchange costs. For details, see Attachment E.) Once the project was approved and all pre-conditions met, a detailed A&E survey and engineering design would be undertaken for the construction components, and a Project Management Office headed by an appointee from the lead implementing agency, would be established.

A. Project Packaging

The packaging of capital projects described above grew out of early planning which tended to be broad and comprehensive. Neither the resources of the Bicol Program nor available funding was sufficient to address all of the possible development activities identified. Besides, line agency programs

and municipal and provincial development efforts were proceeding simultaneously with those of the Bicol Program. The present system of articulating a set of related activities in an area, packaging them into a single proposal and coordinating implementation activities has been successful in that projects have been funded and are underway and others are proceeding to the stage where donors can be engaged.

The projects packaged and funded so far are capital construction infrastructure development, principally roads and irrigation with some institutional development. The Bicol Integrated Health, Nutrition and Population Project consists primarily of developing an institution with the capacity to deliver health services to the rural areas. In a similar way, an "agro-industrial development IAD" on the Albay coast, in addition to agricultural development aims at mobilizing available institutional capability to promote agro-industrial activity.

The evaluation team recognizes the success of this project packaging system which includes (1) project identification, (2) project development through feasibility analysis, (3) project promotion for funding, and (4) project execution, including construction and implementation. It attributes this success to the capacity of the BRBDPO to (1) assemble a team of competent professionals for planning, (2) devise an integrating and coordinating system which includes involving line agency directors and local leaders in both planning and policy roles, (3) identify the need for coordinating project support activities (such as research relevant to project objectives and meteorological and hydrological networks to provide more reliable information for project planning), and (4) exhibit a willingness to revise the system in the face of difficulties encountered in meeting objectives. The importance of (4) in achieving past success and meeting the inevitable difficulties now apparent and yet to be revealed cannot be over-emphasized.

B. Project Conceptualization: Past

There are sufficient physical infrastructure projects currently underway (see Attachment E, Table 1.) and a pause might well be made to reconsider project emphasis and scale. An exception might be the major irrigation and rural roads systems outside the physical river basin area. These comments are made in full recognition that large external funding sources such as IBRD and ADB by their funding policies tend to create a bias to large-scale capital intensive projects. Some of these same projects might be better sub-divided as Bicol component projects with separate but coordinated sub-project management offices.

In the opinion of the evaluation team, the existing approach may well capture both engineering and planning bias. "Engineering bias" refers to the tendency to focus on large-scale construction. It is conceivable, for example, that a major irrigation system project could be approved in the absence of even a prima facie investigation of a lower cost (albeit less coverage) irrigation scheme such as the financing of small private irrigation facilities using shallow wells and pumps. Presumably, project analysis during the design and packaging stage lays out the alternatives.

There is a continuous need in planning to consider lower cost and simpler alternatives. If this is not done, particularly when coupled with

enthusiastic estimates of yield benefits due to irrigation, there may be a bias toward capital intensive, design intensive and construction intensive projects.

"Planning bias" refers to the tendency for planners to utilize the latest development schemes. Institutional design based on the principle of voluntary contracting and the minimum amount of imposed collection (e.g., for irrigation associations) may be more consistent with the expressed farm and irrigation association organizational models.

In view of these possibilities, the evaluation team recommends that new component projects be designed and existing plans reviewed in accordance with the principle of providing projects with the least disturbance to the physical-social-economic environment in place. In construction, this means investigating projects with lower capital-intensity. In institutional design, this means building on the strengths of existing organizations and contractual arrangements rather than replacing them with the latest, but unproven, systems imported from Manila or other countries.

C. Project Conceptualization: Second Generation Projects

The infrastructure and institutional development projects have been almost totally located in the rice growing regions of the Bicol which are heavily populated and are shown to have more immediate growth potential.

This evaluation team highly endorses the recommendation of the 1977 Bicol evaluation team on the development of upland areas. The initiation of the Buhi agro-forestation/watershed pilot project (funded by the Bicol IRD grant project) is a well-measured response. The progress of the pilot project to date is truly encouraging because it is attempting to (1) identify the appropriate questions with regard to agro-forestation and (2) establish a framework for guiding subsequent component project development and implementation. It is the expectation of the evaluation team that the framework which will eventually evolve will include the integration of a number of activities typically assigned to different line agencies. Thus, the integrated planning approach and coordinating function which have been the trademark of the Bicol Program will be potentially invaluable in packaging agro-forestation development projects, e.g., the Rinconada-Buhi IAD III project is programmed, to add an agro-forestation loan component in 1980.

There are three other program areas which the evaluation team suggests might be investigated and included in future packages. These are (1) coastal zone management, (2) alternative annual crop systems, and (3) smallholder perennial crop systems. These three project possibilities are considered below.

1. Coastal Zone Management

As elsewhere in the coastal regions of the world, the land/ocean boundary area of greater Bicol constitutes a unique resource management zone. The area is typically the breeding ground for ocean fish and crustacean. Land-based activities can substantially impact on and destroy these breeding areas. Also, the economy of the coastal zone is typically made up of inter-connected land and water-based activities. In addition, the common property nature (i.e., unrestricted access to the ocean

resource) presents unique resource management issues..

In the opinion of the evaluation team, the most appropriate approach for achieving overall IAD income and distribution goals in the coastal region is to recognize that the basic issue is rural development in the coastal region and to develop programs based upon the realization that all resources, both land and water, must be considered in project packages.

Fishing is an important economic activity in the coastal zone of the three-province Bicol Program area. This has been recognized by Bicol planners. There have been a number of initial proposals for fisheries development. These proposals will necessarily need to recognize (1) that the set of activities which must be addressed for an artisan fishing community is no less than that for an agricultural community and (2) that a rural community may combine both fishing and agriculture with the complicating issue of the common property ocean resource. A component of the proposed (AID-assisted) artisan fisheries project, if approved, should be targeted for the Bicol since it attempts to address these issues.

This argues once again for an integrated package approach to coastal development of the type which has become the trademark of the Bicol Program approach. Also, a recognition of the uniqueness of the coastal zone resource area calls for creating a special planning expertise within the BRBDPO. The common property resource use issues are sufficiently complex to suggest that individuals with expertise in fisheries economics would be valuable in developing such programs. But it must be strongly emphasized that any coastal zone management objective must recognize that fishing is only one of a multiple set of activities in the coastal zones and that there are important interactions between land and water systems and resource use.

2. Alternative Annual Crop Systems

There are approximately 116,000 hectares of rice land in two of the three Bicol Program provinces, Camarines Sur and Albay. The net addition to multiple-cropped irrigated acreage after the completion of all projects funded and/or under construction is estimated to be approximately 21,000 hectares. Most of the rice land of the 3-province Bicol Program area will be unaffected by the irrigation projects although some other areas may benefit from flood control, additional irrigation water, reduced salt water intrusion in the lower basin and emphasis on water management. Any potential for output growth in the non-irrigated rainfed areas of the Bicol has not been developed especially with regard to alternative crops. Alternative and complementary cropping systems for and with rice have been investigated by various research agencies in the Philippines. Attention to identifying and planning this type of crop management has been a very minor part of current Bicol Program development activities. The evaluation team recommends that attention be given to supporting line agency efforts at further exploring these possibilities.

The recommendation also has implications for planning staff development in the BRBDPO similar to those spelled out in our discussion of agroforestation. In addition, it points to the need to maintain a high

level of technical experience within the BRBDPO, possibly a combination of core and detailed staff in the agricultural sciences including agricultural economics. Of very particular importance, the evaluation team calls attention to its concern for water management at the farm level as discussed below. Alternative cropping systems to rice and with rice will necessarily require understanding of the control of water both in drainage and irrigation and as a component of land preparation.

3. Small-Holder Perennial Crop Management System

The BRBDPO has had little direct involvement with the perennial cropping areas of the Bicol. Approximately 34% of the total combined area of the provinces of Albay and Camarines Sur is planted to coconuts. The percentage may be greater in Sorsogon. The team was not able to obtain information on total employment or land holding patterns in the area. There are general impressions and opinions, but no hard data was provided on the status of the Bicol coconut industry. The evaluation team recognizes that there are national programs directed at coconut industry development in the Philippines. In addition, the team is of the view that the potential for developing crop management systems for coconut small-holders (up to 10 hectares), e.g., intercropping, cover-cropping, and livestock fattening, should also be considered. Once again, an integrated planning and project packaging would be required, including planning staff requirements.

4. Non-Agricultural-Based Projects

Early resource assessment, along with more recent reports, indicate extensive mineral resources in the area (both metallic and non-metallic). These resources might well be the ultimate basis of substantial income growth in the region.

In summary, the team recommends that second generation projects in the Basin include:

1. agro-forestation
2. coastal zone management
3. perennial cropping systems for small-holders
4. annual mixed cropping systems

Pilot efforts should be continued as initiated now in these areas to provide information and direction for future planning.

V INDIVIDUAL PROJECT CONSIDERATIONS

The evaluation team examined all on-going component projects by referring to consultant evaluation report, periodic project reports and documents, and on-site visits. The following discussion reflects the concerns of the team which, in most cases, could be generalized across similar types of projects.

A. Integrated Rice/Irrigation

The documents for those projects which include an irrigation component have calculated cost/benefit ratios based on expected yields on the net irrigated acreage after the completion of construction. Yield benefits are projected to grow from a lower level in the first year up to maximum in five years and then continue over the life of the project.

Total benefits to the projects will depend, among other things, on the yield increase actually achieved by the farmers and on the total acreage actually irrigated by the systems. Obviously, actual benefits will be less than projected benefits if either yield or irrigated acreage assumptions are overestimated.

In the opinion of the evaluation team, it is important to indicate the source of growth of the project benefit streams as clearly as possible. It is important for both farmer and project personnel alike to understand what has to be accomplished to realize benefits from the project. Also, if an irrigation fee schedule is based on unrealistic benefit streams, considerable costs and difficulties will be imposed on the collection system and/or the adoption of the recommended farm practices will be greatly slowed.

As an example, substantial yield increases estimated in one project (Bula IAD II) are based on the assumption that the project irrigation system will be dramatically more effective than the owner-operated shallow pump system it will replace in a portion of the area. The data to support this should be reviewed. Yield increases on this acreage will much more likely have to come from changing cultural management and fertilizer practices. This makes it more critical to investigate what changes should be made and devise strategies for effecting them.

In the discussion which follows, we consider in turn (1) yield projections for irrigation projects, (2) possible decreases in the area which can be irrigated by the projects, and (3) institutional issues related to the success of irrigation projects.

1. Yield Projections

The methodology for making yield projections could be improved in a number of respects. In both the Rinconada and Bula IAD project studies, the areas within the projects are treated as homogeneous once the irrigation and flood control facilities are in place. Studies conducted at IRRI, however, suggest that substantial land quality differences exist within even small irrigation areas. Specifically, it is likely that the land being irrigated in the project area before the new irrigation system is of higher soil fertility than non-irrigated land because fertility is one of the determinants in the decision of the farmer

to invest in his own irrigation system. Thus estimating the benefits of irrigation by comparing the yields of rainfed and irrigated areas with the project area is likely to result in an upward bias of the benefit estimate.

In addition to soil fertility, yield differences between rainfed and irrigated regions are also associated with differences in inputs. Thus, even for areas of equal soil fertility, assuming that yields on rainfed areas will immediately jump to match the yields on irrigated areas during the first year of irrigation is overly optimistic (see average yield projections for first year of irrigation in Libmanan and Bula).

The yield estimates of 160 cavans/ha/yr in Rinconada and 180 cavans/ha/yr in Bula (1 cavan is equal to 50 kg) after five years of irrigation are based on judgement plus the implicit assumption that farmers will be converted to "modern" practices. Given average rates of return on extension, achieving the required 10 per cent annual growth rate in yield, Rinconada will require very intensive and more effective extension services.

Improved methodologies for estimating the benefits of irrigation are available. One methodology involves converting rainfall into moisture stress via a water balance model. Given a rainfall distribution statistics, necessary seepage and percolation information, and a production function which includes moisture stress, one can estimate the benefits of additional water. In addition, the methodology would have to be combined with a method for determining the effect of irrigation on timing of the cropping cycle throughout the year. This, plus the available sunlight radiation distribution data, can be used to estimate the total benefit of irrigation. The projected yield increases implicit in the Libmanan-Cabusao and Bula projects call for yields to increase from two to three times their present levels in response to the irrigation/flood control construction and from accelerated extension. Comparison with other studies shows these projections may be somewhat optimistic given the impact of irrigation on the probabilities of moisture stress and flood damage and given the small amount of technical and price inefficiency inherent in farmers' production decisions.

The benefits of extension can also be estimated. Studies show that farmers are efficient allocators of resources given their own level of knowledge. The difference between the farmers' production function and the experimenters' production function in work at UPLB and IRRI provides an estimate of the maximum that can be achieved from applied research and extension. In order to reach the potential production function, research must first discover what the appropriate production technique is for each locality. Extension then has the task of conveying the information to the farmers. Increasing the number of contact hours between extension workers and farmers is not sufficient to achieve these potential gains.

The following recommendations are considered important for clarifying the yield potential and activities required to achieve that potential in the irrigation project areas:

a. Field trials should be continued in all IAD project areas by the line agencies concerned under the general coordination of the Bicol Agriculture and Resources Research Consortium and BRBDPO to establish the appropriate farm practices which should be adopted by farmers given current technology. Further, this effort should be coordinated with evaluation activities, e.g., BAEcon data generation and BRBDPO Farm Records Project for feedback to, and action decisions by the Composite Management Groups (CMG's) and the Project Management Offices (PMO's) of the respective projects. Much of the machinery for this applied research is already in place. What is needed is the capacity to analyze these data with updated economic methods (incorporating stochastic weather variables and individualized shadow prices of labor and credit).

b. Immediate analysis should be carried out by the appropriate agencies to consolidate all available rice yield data from the region so as to establish to the extent possible:

   (1) irrigated dry and wet season yields

   (2) rainfed dry and wet season yields

   These data should be analyzed with respect to:

   (1) variability within agro-climatic regions in the Bicol

   (2) variability between years within agro-climatic regions, and

   (3) the potential of output growth based on increased inputs of irrigation, fertilizer, insecticides, and other indigenous but potentially productive cultural practices. Experienced senior Filipino consultants are available to assist with this and should be considered for funding under the Bicol IRD Project.

2. Irrigation Projects: Restrictions to Irrigable Acreage

Salt Water Intrusion - One historical and future cause of a reduction in the irrigated hectarage in the lower basin is salt water intrusion up the rivers and streams where project pump sites are located. The river bed at a number of these pump sites is below sea level. There is some uncertainty as to whether or not salt water will intrude upstream to the pump site in the drier years. The uncertainty, in part, arises because of uncertain return flow. What is quite certain, however, is that if high concentration of salt water does intrude to the lower basin pump sites, there will necessarily be a reduction in yields and in irrigated hectarage in the drier years, the very years when the economic returns to irrigation are likely to be highest.

Another possible source of difficulty and decrease in irrigated acreage can result from a rising water table. In Libmanan, the water table in

the dry season is said to be one-half to several memters depending on location. A rising water table coupled with salinity problems could adversely affect crop yields.

There have been studies and the evaluation team could not find any conclusive data or opinion to show that any of these difficulties will occur. There is enough evidence, however, to suggest that the potential for problems exists and that the effect would be to decrease the benefits to project areas. Given this uncertainty, the evaluation team recommends that an expert hydrologist be employed to do follow-up investigation of the soundness of assumptions incorporated in the basic project design, particularly for the lower basin. Adjustments could then be made to the benefit of the farmers who will benefit from the projects and who are being asked to pay for the projects through irrigation fees. The evaluation team understands that hydrologic data collection and analysis as well as the publishing of the results of the complete Bicol River Basin are scheduled to be upgraded. This is essential. The National Water Resource Council (NWRC) can play an active role.

Very closely related to this, the evaluation team notes that the ecological implications of larger irrigation systems suggest that proposed follow-up environmental analysis be undertaken. A competent ecologist should look into environmental impact issues such as:

a. how the pumping systems will affect the downstream river areas;

b. how the pump systems will affect the river resources (e.g., shrimps, fishes, eels) and marine resources;

c. the environmental impacts of diverting water and modifying drainage patterns;

d. impact of construction, roads, leveling, etc.

Plans to contract for Filipino and U.S. consultants in the above areas throughout the joint Bicol IRD project should be implemented.

3. Water Management

The evaluation team is particularly concerned about the very immediate need for water management expertise and planning across all projects with irrigation components. For example, based on existing experience in the Philippines, it is unlikely that the rotational irrigation systems will actually be operated according to the intensive management required in the project designs. Rather, it is likely that the system will be operated as a continuous flow system, at least in the early years. If this occurs, water losses from seepage and percolation may be even greater in the rotational designed systems than if they were

built in the conventional way. The general point here is that farmer behavior and management capability need to be thoroughly accounted for at the engineering design stage. Experience in the Lologon Command Irrigation System can perhaps be utilized in this effort.

In the opinion of the team, U.S. and Filipino water management consultants with proven expertise in rice irrigation and in supplemental irrigation systems should be employed by early 1980. Such consultants would work with technicians of participating line agencies particularly NIA and the Bicol Agricultural Research Complex to advise on and monitor the process of the irrigation systems. This would include establishing appropriate soil and water use measurements needed to gauge the efficiency of the systems. They should be knowledgeable in the coordination of irrigation water release and crop production practices and have an appreciation of the role of water with other production inputs. They should be capable of investigating the suitability of the rotational irrigation systems in the production of crops other than rice (per recommendations above).

Emphasis must also be given to the fact that failure to establish appropriate water management practices at the beginning of actual irrigation will substantially prolong project implementation beyond the scheduled year period.

The evaluation team also recommends workshops be held for project managers and staff and Bicol Program staff on irrigation rotational systems already in place elsewhere in the country so that experience gained in these systems can be available to the Bicol. Proposed operational training (AID-supported) in another Asian country for the senior staff who will operate the major systems and local line agency staff would also be valuable.

B. Integrated Rice/Irrigation: Institutional Considerations

1. Farmer Organization - Bula IAD Project Proposal

The physical boundaries of the units of rotational irrigation systems will be the basis for forming irrigation associations. Farmers whose lands are contained within each rotational block would be organized into an irrigation association. This association would be responsible for allocating water from the turnout through the farmers' fields. Within these blocks, compact farms would be organized, one compact farm for each rotational unit within the rotational block. The compact farm units, would also be responsible for irrigation from the sub-farm laterals. A compact farm may undertake multiple functions including (1) management of the farm by an elected member (compact farm coordinator), (2) assumption of joint and several liability for supervised production credit from institutional sources, and (3) marketing to assure loan collection. A training center (CFTC) would be set up in the system area for compact farm coordinators, farmers, and extension workers.

In areas where land consolidation has not been carried out, theoretically a number of the farmers could be members of two or more irrigation associations and possibly an even greater number of compact farms. In addition to these organizations, Samahang Nayons (pre-coops) have been established generally on a barrio boundary basis. Local leadership could be severely extended if called on to hold offices simultaneously in a number of organizations.

In the land consolidation area, the number of organizations for individual farmers will usually be less. A problem here may be that since landholdings where movement was required were assigned on a lottery basis (in some areas on joint agreement basis), individuals may be required to join organizations whose membership is determined by physical boundaries rather than by natural inclination to associate with friends and associates by choice. This association may be a source of friction in carrying out the duties of the organization. The possibility of this same situation in the Libmanan IAD project was reported by a recent evaluation.

The evaluation team suggests that the organizational burden imposed on both the farmers and the organizers given this proliferation of organizations may be great.

It may be possible to avoid similar potential problems in the future by taking advantage of available knowledge concerning the advantages and disadvantages of voluntary agricultural institutions and those designed by government planners. Two examples seem worth including here:

a. Regarding land consolidation and compact farming, modern theory and evidence do not support the conventional view that small farmers with somewhat scattered holding are inefficient. If anything, the evidence suggests the the opposite conclusion. Consolidation and centralized management are likely to decrease efficiency instead of increase it. The Bula Project has consolidation, but individual management.

b. The conventional wisdom that agricultural development requires a comprehensive and simultaneous assault on "institutional constraints" is also without theoretical or empirical basis. For example, share tenancy, as it has been practiced in most of the Philippines, has been largely an efficient contractual arrangement. It is not necessary in the name of efficiency to legislate the abolition of share tenancy. If agriculture is healthy and characterized by wages rising relative to rents, share tenancy will decline spontaneously without government regulation.

Considering all the complexities, controversies and issues associated with rotational irrigation, the viability of irrigation associations,

compact farms and Samahang Nayon, the design for institutional development deserves a serious second look before system-wide efforts to implement it get underway. The present design might have to be treated with less sanguinity than is now presently held.

c. Irrigation Fees

The cost of irrigation to the farmers who will benefit from the irrigation projects being constructed in the greater Bicol area has not yet been determined. There is some uncertainty regarding national irrigation policy. One system calls for a set of fees which will cover both operation and maintenance costs and the construction and implementation costs of the project. Early estimates of the cost to individual farmers in the Bicol if this formula is applied are between 11 and 22 cavans per hectare per year depending on which components of the project are to be paid for by the farmers.

There is considerable reason to believe that farmers will be reluctant to pay these fees because (1) the average benefits from irrigation will not be as great as estimated at the time the projects were designed, (2) the availability of irrigation water may not be constant on a year-to-year basis, and (3) there will be a resistance to pay charges greater than those being levied on nearby gravity flow communal systems.

The evaluation team notes that (1) project costs in some cases have been increased because of design difficulties, increased POL and other costs and delays, (2) that there could have been additional studies to determine if systems as designed are the least-cost system, and (3) that pricing water on the suggested basis may likely result in prices that have little relationship to the value of water to the cultivator.

The present national policy on irrigation repayment calls for repayment to cover capital expenses and operation and maintenance costs. A fundamental ambiguity in the policy exists, however, according to which farmers who are unable to pay will not be forced to. This introduces a great deal of discretion into the collection procedure. This ambiguity should leave room for the Bicol projects to experiment with a system under which farmers pay proportionately to potential benefits that could be received from irrigation. Potential benefits would be assessed independently for various classes of farmers according to topography, access to and reliability of the water, and economic characteristcs of the farm family.

d. Land Consolidation

The case for including land consolidation as an ingredient in a rotational irrigation system appears not to have been based on economic considerations. The pilot land consolidation

activities in the Bula project provide an ideal test case for comparison with projects where land consolidation has not been carried out. Accordingly, it is recommended that there be a close examination of the land consolidation in the Bula IAD project with a view to assessing the merits and demerits and the rationale of the entire approach. If land consolidation appears to place unnecessary burdens on many farmers, then the system should be redesigned rather than continue a commitment to a "pilot project."

C. Applied Research to Support Project Identification and Implementation

The evaluation team was generally concerned as to whether the Bicol Program was incorporating the results of recent research into planning the agricultural components of projects and integrating and coordinating local testing of that technology within the project area. Additionally, the team was concerned that a mechanism should be strengthened whereby research needed to support project identification and implementation could be made known to the appropriate research institutions both in the Bicol and throughout the Philippines.

The team noted that the need for these activities had been recognized early in the development of the larger Bicol Program. A coordinated research council composed of the local agricultural college, line agencies and the BRBDPO was formed which would presumably be active, both in transferring research results and in tailoring research activities, where required and feasible, to the agricultural production potential which has and will be created by investment projects.

A recent reorganization and expansion of that Bicol Agriculture and Resources Research Consortium (BARRC) promises expanded activity in coordinating research activities in the region. In addition, the Soil and Water Management Research and Training Center, part of BARRC being constructed on the campus of the Camarines Sur Agricultural College, will provide a new source of research output and interaction at the operational level. Specifically, the evaluation team recommends

1. That BRBDPO participation in the Bicol Agriculture and Resources Research Consortium (BARRC) be considered a priority activity as part of research coordination and a monitoring requirement for BRBDPO operations.

2. Similarly, the BRBDPO should become intimately involved with the Soil and Water Management Research and Training Center. This should serve as a means of directing research efforts into problems encountered in project areas and in supplying a source of research results to BRBDPO planning staff and BRBDPO project coordinations.

3. The BRBDPO should strongly support the involvement of UPLB, IRRI, PCARR, BAEcon, NIA, FSDC, MLGCD (coops) and others in the Basin research program, through the Soil and Water Management Research and Training Center.

VI BRBDP AGRIBUSINESS AND RURAL INDUSTRY ACTIVITIES

Under its charter, the Bicol Program is concerned with private sector development and its major contribution to regional development. One Bicol Program activity supported by the joint Bicol IRD grant project is promotion of accelerated private sector investment in agribusiness and rural-based industry. The Bicol Program strategy is largely based on the development hypothesis that complementary public sector infrastructure projects and expanded social service programs in the Bicol, in conjunction with appropriate governmental incentives and promotional activities, will further stimulate private sector investment in agribusiness and rural-based industry.

The grant project thus provides complementary resources to assist the BRBDPO, the NEDA Regional Office, and concerned line agencies in the development of a regional agribusiness and rural-based industry strategy and action program designed to stimulate a significant increase in private sector investment. This includes an assessment of possible GOP investment promotion and incentive activities and the preparation of commodity or enterprise specific prefeasibility studies, particularly larger, primary industries that would have multiple impacts.

There are two basic questions that need to be addressed to put the assessment of private sector investment promotion of a Bicol interagency effort in proper perspective: (a) what factors encourage private sector investment in the Bicol? and (b) what are the constraints to private sector development in the Bicol? The succeeding discussion draws heavily on existing reports.

The following appear to constrain the acceleration of private investment in the region:

1. Higher power rates - Despite the fact that Bicol has already been connected to the Luzon Grid through the NPC Geothermal Plant at Tiwi, Albay, power rates are higher in this region than in Manila or southern Quezon Province;

2. Poor intra-regional telecommunications network - no direct communication system links the major cities of Legaspi, Tabaco, Iriga, Naga, and other municipalities;

3. Ineffectiveness of fiscal incentives which are inaccessible to small scale Bicol entrepreneurs or are not worth the trouble and cost of trying to avail of them;

4. The typhoons which periodically devastate Bicol's basic agricultural economy; and

5. The collateral-oriented conservatism of bankers.

Recent changes in the region's investment climate may result from a number of factors:

1. Most of the Bicol is linked to the Manila market by a new all-weather road and rail, the latter is presently being upgraded;

2. The region is rapidly being covered by rural electric cooperatives which will receive power from Tiwi geothermal sources;

3. The region has its own uncrowded international seaports and conveniently located inter-island ports of modest facility; and

4. Wages may be relatively low compared to other regions.

Currently, there is a move from the national government for the dispersal of industries to the regions, away from the Greater Manila area. In the absence of a defined regionalized scheme of fiscal and/or monetary incentives, location of private investments will largely depend on whether a favorable climate of investment exists in that region. In other words, the ability of a region to attract private investment will largely be influenced by what the region can offer to investors.

Recommendations:

1. Preliminary Bicol Program investment promotion activities have been largely concentrated on the preparation and promotion of prefeasibility studies on agribusiness and/or agro-industrial projects. Considering that a rational investor will somehow have to undertake an investigation of the project using his own set of assumptions and policies, we believe that this activity is largely unnecessary. Instead, general area profiles depicting the available and abundant resources and business opportunities in the region may be prepared and widely disseminated. The preparation of brochures as general investment guides for interested investors now underway may prove to be more useful.

2. In the area of agribusiness promotion, the efforts of the BRBDPO can only complement the efforts of the private sector. With this in mind, the agribusiness program should focus on the areas where private investment may be inhibited because of difficulties in obtaining the necessary information, designing and enforcing the requisite contracts, or in coordinating investment efforts across enterprises and investors.

   Numerous projects have been identified as potential areas for private investment in the Bicol. Unfortunately, there has been no documented effort which relates and coordinates agro-industrial projects with production programs for particular agricultural commodities. However, we note that this is included in the scope of work written for a newly contracted Filipino spatial planner. For instance, of the ten preliminary contractor-prepared studies, about five are considered viable by the BRBDPO, based on assessments of their resource requirements.

   As an example of the need for coordinating investment, the viability of the citrus juice extraction project would largely depend on the ability of the citrus farmers to supply the requirements of the project as and when needed.

   As an example of the possible benefits of information, the case of cement is instructive. China produces large quantities of low-grade cement for use in lining irrigation canals and for mixing with other cement in some construction projects. Unlike high-grade cement, the product can be

produced on a relatively small scale and with labor intensive methods. Without doing a full scale feasibility study, the BRBDPO agribusiness staff could look into the technical potential of similar examples of appropriate technology.

3. Recently, the agribusiness staff of the BRBDPO was chosen to serve as the technical secretariat to the Regional Council of Small and Medium Industries (RCSMI). We believe that with the full support of the BRBDPO, the RCSMI could effectively function as a strong coordinating body for private investment promotion and acceleration in the region. Two activities which the BRBDPO could undertake to encourage private investment and entrepreneurs would be to act (1) as a reference source for directing investors to needed data sources, rules, regulations and appropriate agency officers, and (2) in an advisory capacity regarding dealing with the local, provincial and national bureaucracies. These activities could be part of the duties of the RCMSI technical secretariat.

VII STAFF TRAINING AND DEVELOPMENT TO SUPPORT PROJECT PLANNING AND COORDINATION

One of the strongest assets of the BRBDPO has been its high level of professionalism and dedication of its staff. This was universally true in the planning and management division and the monitoring units of the Bicol Program Office. The evidence of extra devotion to duty is still apparent.

Within the past year, the BRBDPO has reportedly lost the services of most of its more senior planners, several of whom are in long term, advanced degree training). In addition, it was reported that over ten core PMD and PPD vacancies have been vacant for over a year. Any permanent loss is critical if not replaced because (1) there are more first generation projects to plan and the groundwork for second generation projects (based on second generation problems) should begin now, and (2) even if GOP contract consultants are used for future planning efforts, it is crucial that the Bicol Program Office have sufficient experienced personnel on its own staff to prepare scopes of work based on a knowledge of the local issues, monitor analysis, and supervise contractors and consultants.

Therefore, the evaluation team feels it is imperative that a rebuilding of the BRBDPO planning staff be undertaken. There is recruitment underway to hire senior staff and the junior staff may be developed to assume greater responsibility.

The team strongly recommends that restaffing be carried out with a view to assembling the particular expertise required for planning projects such as agro-forestation and mixed fishing/farming (as discussed above) which are within the identified comparative advantage of the BRBDP.

The general view among professional planners is that a minimum of two years on-the-job training is necessary to develop the skills and background of a new graduate to the point where they can make significant contributions to area-specific project planning. The evaluation team suggests that this time horizon be incorporated into a staff development program. The team also notes that regardless of whether or not the various types of functions the

BRBDPO undertakes continue to be carried out by that entity or are incorporated into a governor's office or a NEDA-RDC framework, the success of the BRBDP packaging process argues also for immediate attention to planning staff development. The team also recommends that this staff planning recognizes the need for (a) planners with a broad integrating capacity, and (b) planners with relevant specialization. This further argues for maintaining a staff of sufficient size to allow for this diversity in job assignment. This staff should continue to play an active role in the annual process of updating the 5-year Regional Development Plans and proposed Regional Investment Plans under NEDA.

The following set of recommendations specifically lays out suggestions of the team regarding staff training and development.

1. The full restaffing of the planning section of the BRBDPO should proceed on a priority basis. A high level of capability is essential for planning second generation projects and for technically supervising and assessing the increased level of contractor documents and performance.

   Required are additional competent and experienced professionals and opportunities for competent younger staff to move up. Any new recruitment must recognize the need for expertise in agriculture, including perennial and annual cropping systems, economics, agro-business, rural institutions, and irrigation/water management. There can be no substitute for hard experience. It will require special incentives to attract and keep these kinds of people.

2. The BRBDPO should sponsor and coordinate seminar/workshops for BRBDPO professional staff and for the personnel of cooperating agencies to update them on the latest research findings and other developments relevant to their planning, coordination (implementation), and monitoring/evaluation functions. Such interagency meetings would provide a mechanism for discussing project ideas and plans.

3. The BRBDPO should give all staff members the opportunity to visit and possibly work at project sites to gain first-hand familiarity with operations.

Other Activities to Support the Operation of the BRBDPO

The following recommendations concern support activities which, in the opinion of the evaluation team, will contribute to the efficiency and strength of the Bicol Program

1. A special depository for important Bicol Program documents should be created to complement existing library facilities. Particular attention should be given to such things as maps and plans. Current maps should be made available to all participating agencies on a cost basis.

2. A special index of all materials should be produced by the BRBDPO for public access.

3. The BRBDPO and national line agencies (with USAID assistance for Asian countries and U.S. when appropriate) should invest in the training and

general upgrading of line agency technical staff capabilities in agriculture and water resources development and related areas, because, in the ultimate analysis, project implementation and farmer support are their responsibility.

Public Information

The BRBDPO has an active and, in many cases, has carried out an effective public relations program. Public and private institutions are involved with excellent results. The team recommends that BRBDPO publicity efforts be carefully designed and monitored to insure accuracy. Misunderstanding and unduly elevated expectations only add confusion and frustration. An updated, accurate, rhetoric-free framework plan capturing the essence of the Bicol Program would be an appropriate public information document.

Extensive studies, reports and other Bicol Program documents exist, but to more fully understand the existing conditions, plans, goals, component projects, etc., one must search many documents. The team recommends that a professional, technical level document be prepared and published on the Bicol Program and the component projects for distribution to Philippine institutions and professionals, as well as international professionals involved in integrated area development.

VIII PROJECT EVALUATION (BMS) - COORDINATION

Central to impact evaluation, but also important to project design and coordination of project implementation phases is the Bicol Multipurpose Survey (BMS). Regarding impact evaluation, the BMS provides a comparable benchmark for all IAD projects. However, it may not provide adequate information for the purpose of assessing the impact of specific projects such as roads, health, and industry promotion. For that reason, additional samples and special surveys have been proposed.

A major purpose of the BMS panel design is to help understand the "combined and synergistic effects of the various GOP projects and programs." Closely related to this objective is to "assess" the impacts of the various IAD components upon indicators of change in each IAD project. To achieve this, one must know what these indicators would have been in the absence of the projects. An adequate methodology for determining this has not been developed, nor is it likely to be developed in the near future. Conducting a controlled experiment by selecting "matching barangays" runs into the problem of finding identical sets of forces of change (investment, migration, etc.). Given the difficulties of quantifying impacts attributable to specific projects or sets of projects, the goals of evaluation should be more modest. It is important to monitor the more narrow objectives of the projects, e.g., "Is water reaching the intended beneficiaries in the right amounts at the right time?" In short, if the projects are poorly implemented, uses of methodologically adequate techniques become academic. Once projects have been properly implemented then the "impact question" becomes relevant, e.g., "How do key variables change over time, especially health and productivity indicators, migration, income, per cent of landless or near landless workers and rural wages?" One can then conclude that project X along with other forces of change, Y and Z, have resulted in the measured changes in these indicators.

With these doubts in mind, the evaluation team recommends a review of current survey data sets including the BMS, special project surveys, socio-economic profiles and census data with a view to streamlining data collection and data analysis procedures for input into program planning and project decision-making.

A second look at current data sets should yield more cost effective products of higher utility than is now evident. If it does not, the evaluation team recommends that the comprehensive approach to benchmark surveys and socio-economic profiles should be modified. Smaller but more intensive studies of agricultural organization, migration, wages, and levels of living would be more useful particularly if complemented by the monitoring development indicators such as growth in revenues, electrical hook-ups and usage, transport registrations and agricultural productivity. The individuals assigned to redesign the evaluation methodology should include those well versed in the economics of agricultural development. This will help avoid the problem of designing a survey instrument inconsistent with the realities of the agricultural development effort.

However, before proceeding with the second BMS panel, a test of its usefulness is recommended now. The four research utilization recommendations and suggested approaches that follow are designed to explore the immediate usefulness of current data sets.

First, those parts of the BMS data with immediate potential in the program planning, operational and educational phases of projects should be analyzed as soon as possible. Considerable cost has already been expanded collecting these data and getting them on tape. Their usefulness should be maximized. For example, findings on nutrition and health status, agricultural practices, employment, perceived quality of life, level of possessions, etc., might be useful to health workers, nutritionists, and extension workers in defining the existing situation for the people who responded to the survey. The results of the health worker and extension worker surveys, if presented to their respective agencies, would doubtless have training and operational implications. All these need not wait for sophisticated analysis by top-level Filipino experts. The simple analysis immediately required for the BMS results to be useful can be done by Bicol social scientists.

Two sets of proposed studies using BMS data are, in the opinion of the evaluators, most timely: (1) determinants of agriculture production and the efficiency of the present delivery system of key inputs, and (2) studies of health, nutrition, and environmental sanitation. This analysis should be expedited. The other proposed studies will perhaps be most interesting after the 1981 BMS is completed, but work done on them now will be useful.

We suggest that the BMS be used to identify receptive clienteles for priority information packages within each IAD. Use of this information should be coordinated with the project coordinators of the BRBDPO/PMD and the respective policy level personnel of the various IAD projects.

The BRBDPO/PPD's research arm has in the form of the BMS a data base from which it could initiate such a system. Many potential leverage points can be identified in the sample. For example, while average families may be satisfied with health delivery systems, those families found to be greatly

malnourished (objective measures) may indicate (subjective) dissatisfaction with health delivery. Such a pattern in the data would suggest that there is a target population which recognizes a need and, therefore, is more likely to take action to correct it if they had adequate information. If such households could be served, they may well become voluntary change agents spreading information and creating "felt needs" among their neighbors to "consume" the priority information package, take responsibility for health, and reap the benefits.

There is little evidence to suggest that general nutritional education, mass-produced and distributed, can provide benefits commensurate with its costs. However, priority information packages on mixed home gardens, for example, are more likely to be adopted by families who recognize their need for improved nutrition than by those who do not. On the other hand, increasing real levels of income are a prerequisite to effective utilization of even the best nutrition education packages. Design of priority information packages must take the income constraints into account.

Similarly, rice farmers with relatively low rice yields but dissatisfaction with agricultural extension services would appear to be ready consumers of sound research advice if they had ready access to it. Naturally, the research and information package must be competently designed. The technical capability is present for rice production and is available through line agencies. These agencies, along with BRBDPO and CSAC, are also collaborating under the auspices of the Bicol Agriculture and Resources Research Consortium (BARRC) in adapting agricultural research findings to the Bicol.

In sum, the evaluation team suggests that the analysis of this type of BMS data be expedited and incorporated into planning and programming by the BRBDPO. Secondly, as the priority "information gaps" are identified, research reviews targeted at filling those specified needs should be conducted. In the process, needed leadership will be trained to coordinate the separate technical contributions by line agencies to the various component IAD's into effective information packages and delivery systems. Consumer groups who have both "objective" need and "subjective" recognition of need may be identified by using the BMS.

Third, development of IAD-specific and even agro-climatic region-specific, information packages for rice farmers provides an important opportunity to employ and test the utility of current panel data. We recommend that panel data be put to the test of its utility in project implementation now.

Two directly relevant panels are available: the 200 sets of farm records and the IPC/SSRU 1974-78 Panel Survey. To the extent irrigation has been implemented, privately or government-assisted, the impacts upon management practices and utilization of HYV technology would be useful in planning an integrated farmers' irrigation association and extension education program. As a means to understanding the constraints that must be overcome if target outcomes are to be readily achieved, similar studies using the BMS data for 1978 alone could be useful.

The farm records-keeping project under the BRBDPO/PPD should be used as a tool to learn as much as possible about the farmers' decision-making process with respect to water management, fertilizer practices, weed and pest contro

and labor requirement for rotational irrigation system compared with other systems, rainfed, private pumps, etc.

Finally, the team encourages the deliberate introduction of all Bicol Program documents to relevant and interested agencies and clients, public and private, within Bicol and within other national and regional integrated projects. Through the PAC and the ADT's, the availability of Bicol Program material and library facilities should be widely publicized. Access to the material by regional universities with advanced degree program should be facilitated. Seminars conducted by the BRBDPO for public participation, such as presentation of agro-industrial feasibility studies, should be publicized at highest levels, e.g., governors through the BRBCC. These data bases are capital stock of the region and the returns on the investment should be greatly enhanced.

Finally, these four recommended research utilization strategies plus others identified locally should be tested for their immediate applicability to problems confronted by the Bicol Program and the Bicol IAD component projects. If the projects benefit from these strategies, the methods should be documented and replicated. If it is found that none of the strategies are of significant benefit to the program area or to decision making about implementing similar programs elsewhere, this should be acknowledged. The possibility that comprehensive multipurpose surveys may be judged impractical is real. The BMS failures as well as successes should be widely publicized to facilitate judgment on the utility of the methodology to development programs.

IX PROJECT MONITORING - COORDINATION

The basic experience necessary for developing a management information system (MIS) effective in facilitating decision making and action is evolving through shared experiences of the BRBDPO staff, the various Project Management Offices (PMO's) with their superiors in lead-line agencies, the Composite Management Groups (CMG's) with their respective links to the PMO's, the area development teams (ADT's) and the BRBCC.

In practice, there are three relatively distinct information systems evolving to serve each Bicol component IAD project. The BRBDPO is concerned with both horizontal (among line agencies in the Bicol) and vertical (among national ministries) coordination while the PMO for each IAD project is concerned with an information system to facilitate action within the lead-line agency. Historically, the horizontal and vertical BRBDPO system has been most effective in the project identification, project feasibility and project design phases, while the line agency systems have been more critical in loan negotiation and project implementation phases.

In sum, the effectiveness of the overall MIS for the Bicol Program is dependent upon coordination of various separate MIS's, those of the BRBDPO and those of the lead-line agencies (to date NIA, MAR, MPH, and MOH) for both planning and implementation phases. IAD projects or phases of IAD projects which are most dependent upon local participation, e.g., the Bicol Integrated Health, Nutrition and Population or perhaps the operationalization of rotational irrigation systems, will require relatively more involvement of the BRBDPO horizontal MIS in implementation than has been the case

historically. Specialized projects or phases of projects, like the construction of rotational irrigation systems, are likely to require responsive vertical MIS within both the lead-line agency and, when national level resources of two or more agencies are required, the BRBDPO.

Key problems in the current monitoring-coordination system can be identified by analysis of differences between a vertical MIS and a horizontal MIS. Recommend solutions to these problems are then made by examination of the current system of information flows.

In vertical coordination more than in horizontal coordination, a formal information system to back the always important informal information is crucial. Horizontally, overlapping monitoring system (the PAC, ADT's, CMG's and the PMO) provide for several first-hand observers and many opportunities to share and discuss information within the IAD and the BRBDPO. In the case of horizontal information systems, all parties are more likely to be looking at the same information with a similar regional bias or perspective. On the other hand, within vertical information systems, there are more opportunities for contrasting viewpoints or sets of priorities. While the regional office is looking at one set of data, i.e., the project design, budget and projected completion dates, absolute needs of identified beneficiaries, and regional benefits, the national office is looking at revenue constraints, national priorities, and relative needs of beneficiaries

The "information gap" between the two perspectives leads to inefficiency in project implementation, mistrust at either end of the hierarchy and low staff morale and productivity.

A. BRBDP Vertical MIS

Examination of the current coordination monitoring system suggests that there are considerably more channels for horizontal coordination within the Bicol than there are in the vertical system (Figure 1). Vertically, information flows from the IAD project through two channels:

(1) from the PMO to project directors (usually lead-line agency regional directors) and, as needed, to lead-line agencies in Manila, and

(2) from the Acting Program Director of the BRBDPO through the OCC to the line agency(ies) involved.

The adequacy of this limited number of channels depends upon the nature of the problems requiring action.

Examination of current BRBDPO project status reports (April 30, 1979) provides several examples of identified critical problems which should be addressed through the information systems of the line agencies. However, there is little documented evidence of technically well designed proposals to solve those problems. Furthermore, there is little evidence in the report to show that the PMO or the BRBDPO is systematically and persistently using the vertical information system to solve the problems identified. Formal documentation of problems, actions taken, and recommended solutions certify at least that the PMO has done its job. For this reason alone, the MIS should be designed to encourage and document competent performance on the part of both the PMO and its contractors.

The evaluation team feels that the current monitoring-coordination MIS under the PMD of the BRBDPO (Figure 1) could provide greater project benefits if it were streamlined and incorporated into a results-oriented management information system (MIS) (Figure 2). For several reasons, the time appears to be right for such a transition. First, in collaboration with key BRBDPO and lead-line agency personnel, a streamlined MIS documentation system has been designed.1/ Second, as additional IAD projects come on line, BRBDP personnel have a keen grasp of the need for and the mechanics of the kind of MIS they want to implement.

NACIAD recommendations for MIS systems are also pertinent. To efficiently utilize the recommended Management Committee (MC) and the technical staff of NACIAD, the evaluation team recommends two adjustments to its vertical MIS.

First, in collaboration with NACIAD and NEDA technical staff, the BRBDP monitoring and coordination system for implementing projects should consider installing on an as-needed basis, a formal "special action report" system as backup documentation for the information action reporting system, through both the lead-line agency MIS and through the BRBDP vertical MIS.

Second, it is recommended that the BRBDP consider implementing monthly "exception reporting" for the IAD projects rather than monthly summary progress reporting to the PAC, BRBCC, NACIAD and funding agencies. The exception reports would also summarize the status of "special action reports." The more detailed project status reports currently produced would be submitted quarterly or semi-annually.

Under the old structure of the CCC-IRD, the Management Committee discussed issues and arrived at policy recommendations and action decisions which enhanced the development of the general IAD approach. We cannot overemphasize the need for the reactivation of that type of committee at this point in time. (See Attachment C.)

It is suggested that a Management Committee be established under the NACIAD, composed of the deputy or assistant ministers or assistant secretaries of the member agencies and the program directors of all on-going major integrated projects or programs. It would likely be chaired by the chief operating officer of the council.

It is suggested that NACIAD link up its evaluation and data banking system with the evaluation and research studies being conducted at the basin level. A cursory look at the voluminous evaluation and research data that the basin has accumulated over the years reveals a rich storehouse of ideas, issues, studies and statistical data relevant to the application of the IAD approach in other areas of the country.

These evaluation and research data can be consolidated at the Bicol Program Office and can be tapped by the Project Management Division of the NACIAD Technical Staff in doing comparative studies with other IAD's. An exchange of information can then be facilitated by the technical staff of NACIAD

1/ "Management Information Systems, Bicol River Basin Development Program," BRBDP - Development Alternatives, Inc., September 1978.

among IAD's. These data will prove to be invaluable in the policy formulation effort of the council.

In line with this, we recommend that at least once a year NACIAD should organize a workshop which will enable the operational IAD's in the country to share experiences and problems with respect to the following:

1. Integrative mechanisms such as the BRBCC, the ADT's, etc.

2. Identification and utilization of Filipino and external experts

3. Monitoring and evaluation methodologies, and

4. Popular participation through irrigation associations, compact farms, Samahang Nayon, etc.

B. BRBDP Horizontal MIS

The monitoring of IAD project progress on beneficiary participation levels by various groups coordinated by the BRBDP (ADT's/CMG/PAC/PDC/BRBCC) also accomplishes effective information sharing among responsible offices. If monitoring results suggest very low participation of beneficiaries, the appropriate offices will be informed by their own sources (ADT's) and verified by independent findings of the PAC or a BRBDPO special survey. Adjustments in program implementation should be more readily justified and enacted.

However, information sharing does not insure an appropriate response. The Program Management Department (PMD) of the BRBDPO must play a critical role, particularly when the individual PMO's and CMG's need assistance in adjusting the implementation plans. For example, in the operational phase of the rotational irrigation systems, they must be alert to the effectiveness of irrigation associations as educational tools and stand ready to assist the lead and collaborating agencies in helping farmers learn to exploit the rotational irrigation system to the fullest. Similarly, the PMD of BRBDPO should monitor participant benefits of the integrated health program and move boldly to assist the lead agencies and its CMG to maximize benefits throughout the program area.

To facilitate effectiveness of the BRBDP horizontally integrated MIS, we suggest that project-by-project evaluation coordinators, perhaps the PMD project coordinators, be identified to help the PMO and the CMG use BMS results in identifying demand for priority information packages, employ the farm records data to improve farm management practices, tailor field trial results on cultural practices to the needs of the individual IAD's and monitor other research results for project area application.

C. BRBDP Action and Project Promotion Model: Current vs. Recommended

Comparison of the accompanying figures (1 and 2) representing the current and proposed BRBDP/MIS action and project promotion models provide insight into crucial changes recommended. Currently, action is being handled reasonably well at the PMO level. However, coordination problems continue to exist. For example, non-lead line agency services in a CMG are still

unaccustomed to coordinated action involving two or more lines of authority, the PMO's lead-line agency and their own line agency. While these problems are being worked out, the BRBDP could learn much from the process which would be of value to future Bicol and other national IAD projects.

Vertically, project implementation and promotion could benefit greatly from an articulate but concise documentation of special action requests and focused exception reporting. The BRBCC, the lead-line agencies, and when needed, the NACIAD Management Committee or the Cabinet Coordinator, could provide a program director with the flexibility necessary to solve a variety of problems.

The current model appears to be restricted to a more centralized action path focusing on the OCC. The NACIAD has not formally met and currently no other formal mechanism for coordination among line agencies is available at the national level. The team was informed that considerable coordination is being carried out informally whenever the ministers meet for a variety of reasons--including IAD projects. Some NACIAD business is conducted by memos with all parties initialling. The various OCC's should not be expected to perform integrated area development activities when it has access to line agencies one at a time. Establishment of a Management Committee composed of deputy ministers at action levels appears to be a crucial link to the success of the IAD concept.

The recommended BRBDP/MIS current action and project promotion model (Figure 2) would function as follows (the functions represented by each arrow are narrated by reference to corresponding numbers in Figure 2):

1. IAD/PMO — Performs problem solving functions as per current model (Figure 1) plus

   1c. coordinates information and decision making seminars with BRBDP for PMO staff and CMG, coordinates with PC and PMD in formulation of "special action reports".

2. PC/BRBDPO — Performs problem solving function as per current model (Figure 1) plus providing, via consultants and other sources, information for decision making and "special action reporting" specifically relevant to project level problems.

3. Monitoring Office — Summarizes and compiles monthly "exception reports" on each project and relays information to PMD/BRBDP. Complete project status reports are compiled quarterly or semi-annually.

4. PMD/BRBDPO — Monitors preparation of "special action reports", "exception reports" and other periodic reports, provides needed information relevant to program level problems plus reporting to the Program Director, BRBDPO.

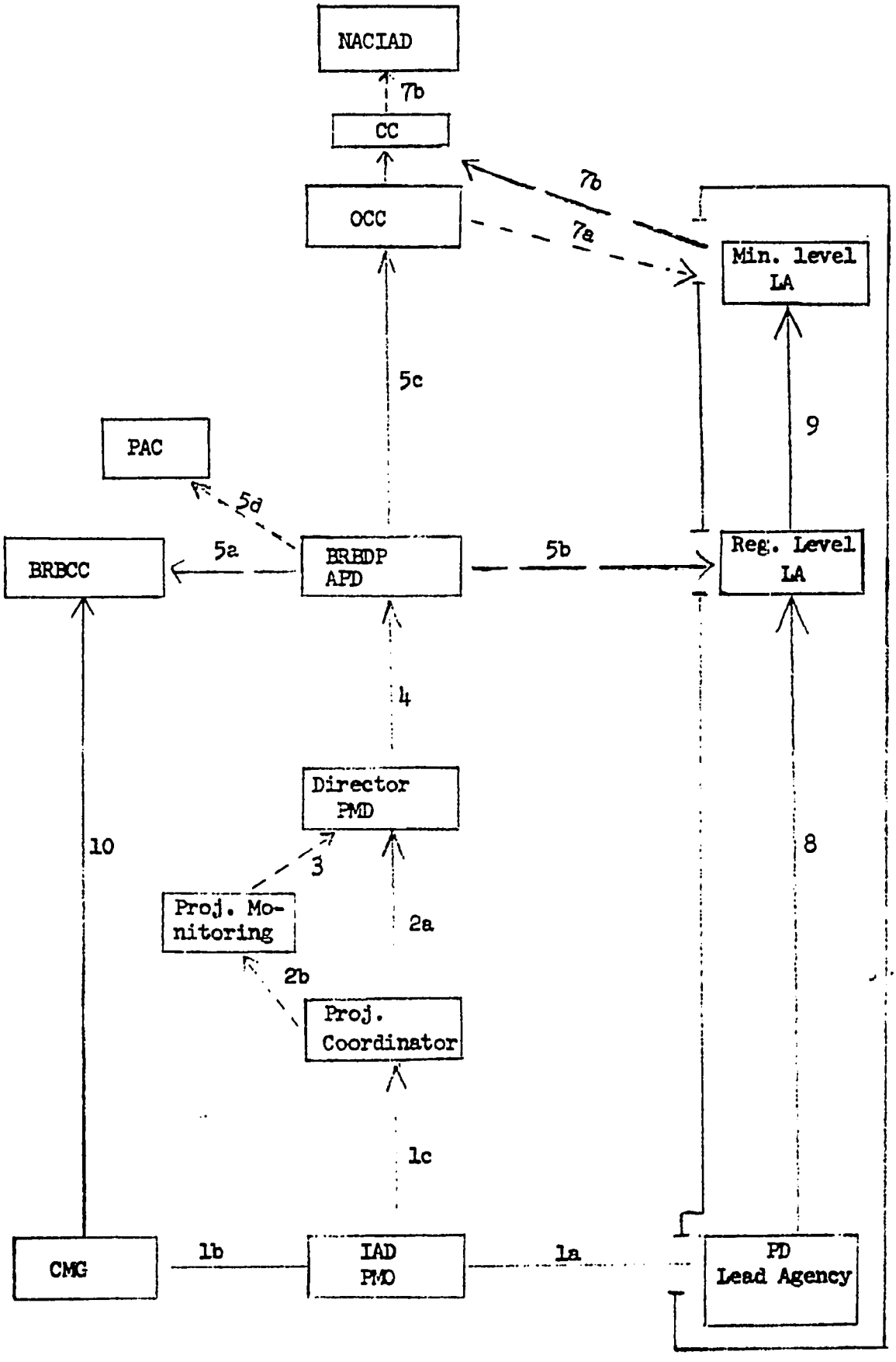


Figure 1. BRBDP/MIS: Current Action and Project Promotion model. Appropriate action is taken at levels closest to the project starting with IAD/PMO. Solid arrows are action requests, broken solid arrows are buffered action lines and dotted arrows are information flows.

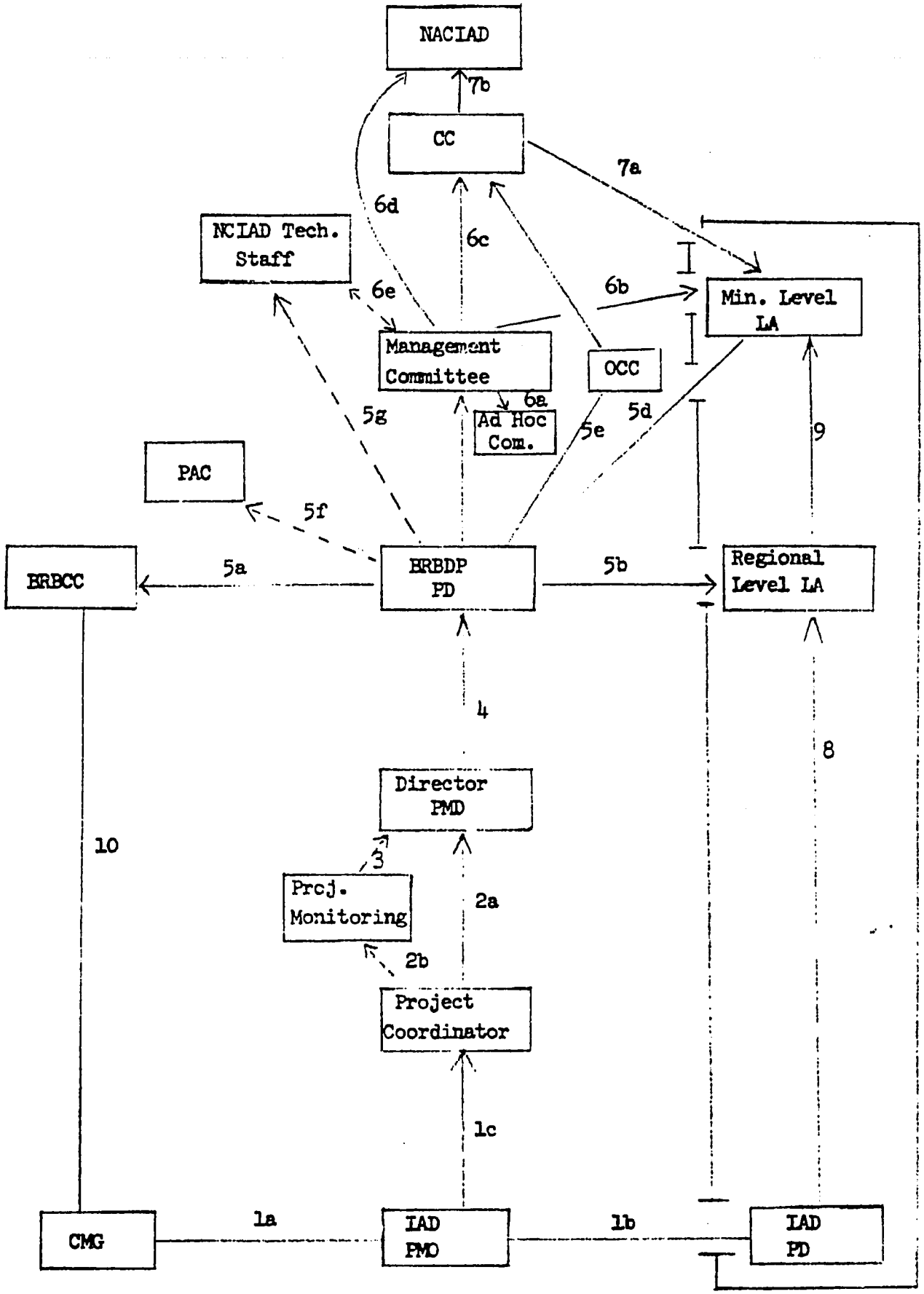


Figure 2. BRBDP/MIS: Proposed Action and Project Promotion Model. All appropriate actions are taken at levels close to the project starting with the IAD/PMO. Solid lines are action requests, dotted lines are information flows.

5. PD/BRBDPO — Monitors projects, assists in problem solving when needed, assesses adequacy of "special action reports," first attempts to solve problem through coordination with BRBCC (5a) or regional level line agencies (5b). If the problem cannot be solved with regional resources in due course, the PD takes the "special action report" to the proposed NACIAD Management Committee for action (5c). Alternately, action may be sought directly from the individual ministries concerned (5d), or once the problem is defined so as to require ministerial or presidential level intervention, it may be taken to the cabinet coordinator (5e). The Private Advisory Council (5f) and NACIAD Technical Staff (5g) are provided monthly "exception reports" and NACIAD receives copies of "special action reports" for monitoring purposes.

6. NACIAD Management Committee, as proposed, may take direct coordinated action with the PD/BRBDPO; or they may refer the problem to an ad hoc committee for determination of appropriate action (6a), to a single line agency (6b), to the Cabinet Coordinator (6c), or the National Council (6d). Information copies of special action reports are shared with NACIAD technical staff for monitoring and staff services (6e). The NACIAD technical staff, through monitoring of monthly "exception reports," and "special action reports" may identify priorities for action by the MC as follows: (1) problems common to all IAD's, (2) problems interagency in nature, and (3) problems single agency in nature, but critical to one or more programs.

7. CC — Provides direct assistance in solving problems, if and when needed. The CC may seek intervention at ministry levels (7a) or through the national council (7b). Almost all problems should be solved at lower levels but the National Council should be sufficiently organized to serve as an effective sanction of the entire IAD implementation system.

8-9. Lead-line agency MIS — Solves single agency problems

10. CMG — Solves multi-agency problem within the BRBDP horizontal MIS.

The BRBDP/MIS: Current action and project promotion model (Figure 1) may be described more or less as follows (the functions represented by each arrow in Figure 1 are narrated by reference to the corresponding numbers):

1. IAD/PMO — Basic problem-solving unit, coordinates monitors of contractors and in-house activities;

   1a. reports to Project Directors (RD's or OSP) of lead-line agency (IAD/PD);

   1b. coordinates with CMG through IAD/PD;

   1c. coordinates with Project Coordinator (PC of BRBDP.

2. PC/BRBDPO — Monitors and coordinates with IAD/PMO;

   2a. reports to Deputy Director of Program Management Department - PMD/BRBDP;

   2b. relays project monitoring information to monitoring office of PMD/BRBDP.

3. Monitoring Office — Summarizes and compiles monthly project status reports and relays information to PMD/BRBDP.

4. PMD/BRBDPO — Monitors project status reports and project coordination, coordinates with projects on identified projects, and reports remaining problems to the Acting Program Director (ADP/BRBDPO).

5. APD/BRBDPO — Monitors projects, assists in problem-solving, when needed;

   5a. informs the BRECC through periodic meetings and monthly project status reports, presents project problems and seeks advice on problem solutions;

   5b. coordinates with regional level line agencies;

   5c. reports to the Office of the Cabinet Coordinator in search of problem solving assistance from the ministerial level;

   5d. informs Private Advisory Council (PAC).

6. NACIAD Management Committee, as proposed, may take direct coordinated action with the PD/BRBDPO; or they may refer the problem to an ad hoc committee for determination of appropriate action (6a), to a single line agency (6b), to the Cabinet Coordinator (6c), or the National Council (6d). Information copies of special action reports are shared with NACIAD technical staff for monitoring and staff services (6e). The NACIAD technical staff, through

		monitoring of monthly "exception reports," and "special action reports" may identify priorities for action by the MC as follows: (1) problems common to all IAD's, (2) problems interagency in nature, and (3) problems single agency in nature, but critical to one or more programs.
7.	Cabinet Coordinator	Provides direct assistance in solving problems;
	7a.	seeks assistance at ministerial level;
	7b.	seeks to place key problems on agenda of the National Council for IAD. However, NACIAD has never formally met. Informally, ministers and deputy ministers interact on IAD matters.
8-9.	Lead line agency	MIS solves single agency problems.
10.	CMG	Solves multi-agency problems through coordination of activities, coordinates with BRBCC if agency concerned is not a member of CMG.
11.	Ministry Lead line agency	Ministry should refer multi-agency problems to NACIAD.

THE INTEGRATED AREA DEVELOPMENT CONCEPT: ITS ORIGINS

In the Philippines the problem of poverty in the rural areas is inevitably linked with agriculture. The majority of the rural poor are economically dependent on agriculture, fishing and agro-related industries and services. Income levels of rural poor are low and rates of unemployment and underemployment are high. The low quality of life profile has resulted in the heavy outmigration of the population to urban areas. Thus, an immediate attempt to raise the living conditions of the rural poor majority must focus on increasing the economic returns to labor in the broad agricultural sector.

In the past, government efforts to alleviate the economic condition of the rural populace through traditional projects in agriculture, industry and infrastructure have been mainly fragmentary, directed at selected production areas and producers. Due to technical and other constraints (e.g., inadequate delivery systems, obsolete technology, etc.), their effectiveness has been impaired, resulting in wastage and misallocation of already meager resources. Some investments in productive facilities like irrigation did not yield the targeted benefits allegedly due to the absence of complementary services and farm organizations. Consequently, rural incomes did not improve as expected.

An integrated strategy for rural development is intended to overcome the perceived deficiencies of the selective project-by-project approach. In the latter, each activity is generally conceived, justified and programmed on its own account and is, therefore, vulnerable to conflicts or gaps that may arise when the disparate activities are collectively assessed. The piecemeal approach may also be inefficient in its use of resources. On the other hand, integrated area development aims to adopt "... a more comprehensive system approach to planning which is supposed to provide for the integration of physical development with the economic, social, administrative and financial aspects of development into a common plan frame for a given area. It is a multi-disciplinary and multi-dimensional exercise which attempts to weigh the pros and cons of all aspects of development, both economic and non-economic."[1/] A number of possible advantages are inherent to this approach: (1) due to its system of inter-dependencies the package of interrelated investments and services reinforce each other which in turn makes for (2) an easier identification of, and planning for, critical gaps and conflicts that may arise, and (3) greater collective net benefits over those in the individual project approach.

Essential to the IAD strategy in the Philippines context is its problem orientation. Crucial bottlenecks and problems of development felt by the people together with the relevant factors behind them, their degree of significance and their interaction are identified. Also identified are the resource potentials--human and material--which are then directed towards correcting the bottlenecks. With this realistic assessment of problems and resources, key projects which are most responsive to development needs can be identified and made the focal point through which other inter-sectoral linkages and environmental implications can be traced. This leads eventually to a framework plan. In every case, the end benefits should accrue to the people.

1/ See Regional Development Projects: Supplement to the Four-Year Development Plan FY 1974-77, National Economic and Development Authority, Manila 1973.

On account of resource scarcity vis-a-vis the extensive needs of development, priority areas selected for IAD efforts are identified on the basis of the following selection criteria: (1) areas with high share-tenancy rates, (2) relatively underdeveloped areas with development potentials in more than one sector of the economy measured by certain indicators, (3) areas whose inhabitants have family incomes below a designated annual amount, (4) areas with potential for swift development as measured by certain indicators, and (5) areas requiring relatively small incremental investment to generate high benefits.

The IAD approach stresses the integration of the various dimensions of programs and projects in the area. Without an effective feedback mechanism, it would be difficult to provide for popular participation and to adjust plans to changing circumstances. Therefore, IAD programs and projects are by necessity structured to reflect a plan-implement-evaluate-modify cycle with the feedback component playing a major role in responsive decision-making. This feature of the IAD approach underscroes the necessity of the decentralization of authority over the effort. The desirability of immediacy in decision-making cannot be overemphasized.

The various specialized interests represented in the IAD plan frame, (e.g., irrigation, crop production, etc.) are expected to view the development process with the common perspective demanded of the IAD approach and tailor-fit their organizational thrust into the common endeavor. No one interest should predominate as this could result into a distorted program. This is, however, easier said than done. The specialized groups often view their involvement in the IAD effort as the execution of their individual mandates. This can easily give rise to rivalry among them for supremacy of position.

It has been proposed, as an alternative to the precarious balance of things found in interagency collaboration, to have the IAD effort under a single new agency. This proposition has its shares of pros and cons. On the one hand, such a move would focus on the integrative approach, without any ensuing competition. The new agency would be free from the restrictive confines of bureaucratic procedures found in an existing agency as well as from its narrow sectoral perspectives. On the other hand, the new agency would have to begin from scratch in developing its own expertise likely to be duplicative of existing agencies and would tend to develop as an authority, thereby verring away from coordinative efforts.

Other issues confront the IAD approach to development. The present state-of-the-art has more questions than answers. However, past experiences point to the wisdom of integration as well as local institutionalization (through local participation and decentralization of authority to a local office) of the development process. In the absence of the latter, the development process does not become <u>self-sustaining</u> and outside intervention is continuously required.

CREATION OF THE BRBDP

The Bicol River Basin Development Program (BRBDP) is a bold, high investment experiment in rural development initiated and carried out by the national government. What makes it an experiment is the fact that while the integrated area development (IAD) concept and approach to rural development has only been recently recognized, it has been put to the field for implementation in such scope and magnitude on Philippine soil. Previous development programs in the country centered on major urban centers with the end view of enhancing export-oriented industrialization. This practice lent itself to the phenomena of aggravating urban-rural disparities on one hand and worsening socio-economic inequalities on the other. The present development thrust being, on the contrary, rural-oriented makes it progressive though not necessarily the ultimate in development efforts. Considering these, the Bicol Program may be considered a breakthrough in development as it has been deliberately designed to reverse the "downward transitional" trend observed by the United Nations study (1967) in the region.

Executive Order No. 412 dated May 17, 1973 created the BRBDP on the basis of the findings and recommendations of the BRBDP Framework Plan ("Blue Book"). The original program area was limited to the 312,000-hectare Bicol River Basin which was recognized as an underdeveloped area but one which possessed high levels of potential productivity. It was subsequently revised by Presidential Decree 926 (April 26, 1976) to include almost all of the provinces of Camarines Sur and Albay.

In October 1977 the President visited the Bicol Region and was very impressed by the work of the BRBDP. This resulted in the signing of Presidential Decree 1553 on June 11, 1978 expanding the Bicol Program area to include all of Camarines Sur, Albay, and Sorsogon provinces.

As enunciated in EO 412 and PD 926 and reiterated in a number of GOP/BRBDP and joint GOP-USAID agreements, the goal of the Bicol Program is primarily to improve the socio-economic conditions and quality of life of the poor majority in the program area. Over time, this will be measured in terms of increased real incomes, distributed more equitably, as well as increased oportunities for people to participate in the development process. Increase in equity is to be achieved in part through land reform, improved productivity of the small-scale farmer, enlarged opportunities for farm and off-farm employment and better accessibility to social services especially in the rural areas.

The Bicol Program operates under the umbrella organization of the National Council on Integrated Area Development (NACIAD) which in turn functions within the framework and administrative supervision of the National Economic and Development Authority (NEDA). The Minister of Public Works acts as the Cabinet Coordinator for the BRBDP.

NATIONAL LINKAGES

Background

In 1973, integration of sectoral programs was recognized by the government as an imperative measure in fostering more effective and efficient rural development. In July of the same year, a Cabinet Coordinating Committee on Integrated Rural Development (CCC-IRD) was created by virtue of LOI 99 to serve as the "highest policy-making and governing body" for all integrated rural development projects. The committee and its predecessors have identified and organized four integrated area projects namely, Bicol, Mindoro, Cagayan, and Samar, based on criteria adopted by the Committee.

The impression at that time was that the Committee despite its accomplishments lacked the cohesiveness of a truly integrated effort primarily because its members were all on the cabinet level. It was only the existence of a program office for the different areas which delineated the difference between "integration" and "cooperation". Although the Minister of Agriculture was then designated as the Chairman of the Committee (primarily because the integrative factor for rural development is agriculture) being of the same level as the other members of the council, the office did not have enough leverage for necessary integration to take place vis-a-vis the sectoral orientation of the line ministries.

In recognition of this weakness and in response to the growing enthusiasm generated by the integrated area development (IAD) approach, the President issued PD 1348 in May of 1978 creating the National Council on Integrated Area Development (NACIAD) which was mandated to institutionalize the IAD approach as a legitimate, viable and integrated approach towards rural development.

The creation of the Council did not in any way disturb the fundamental structural relationship of the program offices and the Cabinet Coordinators which was followed under the defunct CCC-IRD. Program Directors through their Cabinet Coordinators are still responsible for integration at the sub-regional level. This is evident in a structural diagram that shows no direct line linkages between the Council and the various program offices. All linkages with the program offices and the Council pass through Cabinet Coordinators. The Council will have direct linkages with IAD projects before a Cabinet Coordinator is appointed through interim Project Offices; i.e., Palawan.

This does not mean, however, that the Council is totally divorced from the fundamental operations of a decentralized program office. It might be stated that some of the apprehensions aired about the Council not having much of an impact at a program level may be attributed to the following:

1) The Council does not have any direct line linkages with a program office.

2) There are some misconceptions at lower levels on the true functions of the Council.

3) The Council is a relatively new body vis-a-vis the established IAD's.

4) The Council has not yet been formally convened.

The Role of the Cabinet Coordinator

BRBDP is now in its seventh year of operation. It has undergone quite a metamorphosis as an organization from its beginnings with Executive Order 412 to its present structure. In the meantime, other integrated projects and programs have been started in other regions (e.g., Mindoro, Cagayan, Samar) and more major IAD's are in the process of being created (e.g., Palawan, Bohol, Marinduque). With the proliferation of IAD's in the country, there is a need to look more closely into the experiences of the BRBDP and to learn from its experience. One immediate need is to further encourage the role of the National Council for Integrated Area Development (NACIAD) in coordinating, monitoring and evaluating the different IAD's from the national perspective.

At present, a cabinet coordinator is assigned by the President to administer an IAD area. Historically, critical criteria in the selection of a Cabinet Coordinator are (1) that he hails from the area or else can trace roots to the area that qualifies him as a special local representative, and (2) that he holds a cabinet portfolio which enables him to support constituents in the area. In the case of the BRDBP, the assignment of the Cabinet Coordinator is clearly defined.

NACIAD and Program Level Operations

A. Framework Plan for Integrated Area Development

As stipulated in PD 1348, the Council is mandated to "formulate an integrated Framework Plan to guide the development of depressed areas." At the moment, the framework plan is still under development. We can only surmise that it shall be developed based on the following assumptions and expectations.

1. It shall be formulated within the framework of the NEDA plan.

2. It shall spell out the broad guidelines in planning for IAD's including:

   a. Identification of other priority IAD's.

   b. Guidelines for prioritization of projects within specific IAD's.

   c. Guidelines for planning in IAD's which will ensure that the "bottom-up approach in planning" shall be institutionalized.

3. It shall define the IAD approach vis-a-vis other rural development approaches (i.e., area-isolate development, growth center approach, NEDA Regional Development Program approach).

To ensure that the Integrated Framework Plan fosters the continued development and improvement of the IAD approach, we recommend that its formulation include an in-depth evaluation of the experience in the two longest running IAD's, namely, Mindoro and Bicol. It is in this continuing evaluation that the essence of the IAD approach must be captured in actual implementation and analyzed to determine its strengths and weaknesses.

B. Monitoring

"To formulate, adopt and implement guidelines and standards for an efficient system of reporting and evaluation."

In November of 1978, the Council, through its technical staff, conducted a workshop on monitoring techniques in integrated area development. This workshop was to be the first step in the process of formulating a standardized system of monitoring for all IAD projects under the NACIAD umbrella.

One of the processes by which the workshop attempted to reach a standardized system was by determining what common indicators are currently being used in monitoring IAD projects. What came out was a lengthy list of the usual sectoral indicators that line agencies use in monitoring their projects, such as cost overruns, actual vs. planned targets (financial and physical), ratios of serviceable to non-serviceable equipment, etc.

Review of the list gave rise to two basic questions:

1. Are these indicators of primary interest at the Council (policy) level?

2. Are they sufficient for the Council's purposes?

In answer to the first question, it was felt these indicators may have some value at the Council level in terms of assessing the overall health and efficiency of the coordinating mechanism operating in a specific IAD, and if pieced together may give an indication of the common state of affairs for all IAD's. But more important than this are the common bottlenecks that prevent the coordinating bodies from attaining the objectives of integrated area development. It must be emphasized that the IAD approach is an experiment. It attempts to answer how a sectorally oriented government structure can operate by pooling its resources to create an optimum benefit effect in a defined geographical area.

More important than the management (operational) indicators are the "institutional" indicators that will show how effective "integration" efforts are at the sub-regional level and how effective these institutional creations are in fostering development in the area.

To strengthen the line between the Council and BRBDP in particular, a couple of suggestions may merit consideration. The first would involve the institution of "exception reporting" which concerns itself with digression or deviations from expected performance. These reports could supplement the current monthly reports being provided by the Program Office to the Council. Another innovation would be in the nature of the "Special Action Reports" by the Program Office that are addressed specifically to the Council level. These reports are discussed in more detail in Section VIII of the report. These special reports would serve three purposes at the Council level:

1. Serve as a data base for monitoring the development of the IAD approach in the Basin.

2. Serve as a data base for policy formulation at the Council level whereby policy measures are made to immediately respond to common issues affecting the IAD's.

3. Provide the Program Office a higher level of leverage, in the name of the Council, in resolving problems that could not ordinarily be solved at the regional or cabinet coordinator level. The technical staff of NACIAD could analyze these reports using the IAD concept, goals and objectives and the Integrated Framework Plan as basis in determing whether the institutional linkages operate so as to contribute to the optimum benefit and impact on target beneficiaries. From here the technical staff can formulate recommendations on alternative institutional arrangements that may enhance operations at the IAD level.

C. Evaluation

With an in-depth interest in the IAD approach, it is suggested that NACIAD link up its evaluation and data bank system with the evaluation and research studies being conducted at the Basin level. A cursory look at the voluminous evaluation and research data that the Basin has accumulated over the years reveals a rich storehouse of ideas, issues, studies and statistical data relevant to the application of the IAD approach in the Basin.

These evaluation and research data can be consolidated at the Program Office and can be tapped by the Project Management Division of the NACIAD Technical Staff in doing comparative studies with other IAD's. An exchange of information can then be facilitated by the technical staff of NACIAD among IAD's. These data will prove to be invaluable in the policy formulation effort of the Council.

In line with this, we recommend that at least once a year NACIAD organize a workshop which will enable the operational IAD's in the country to share experiences and problems with respect to the following:

1. Integrative mechanisms such as the BRBDP, the ADT's, etc.

2. Identification and utilization of external experts.

3. Monitoring and evaluation methodologies, and

4. Beneficiary participation through irrigation associations, compact farms, Samahang Nayon, etc.

D. Budgeting

"...to approve requests of the implementing department and agencies for budget releases for projects in accordance with the integrated plan of action..."

"...to institutionalize the implementing mechanism for integrated area development through ...budgetary controls..."

No doubt, the responsiveness of the budget process to an IAD undertaking is critical insofar as the requirement of efficient synchronization and mobilization of multi-sectoral resources is concerned. This is the main rationale by which the Budget Ministry was included as a member of the Council.

With the inception and implementation of the Key Budgetary Inclusion system by the Budget Ministry, IAD projects are more or less assured that whatever requirements they asked for shall be incorporated in the National Appropriations Bill. Also, it assures that resources appropriated for IAD component activities may not be used elsewhere.

The weak link in the budget chain, however, still lies in the budget release process. Delays in budget releases and the tedious cash disbursement ceiling has been a problem for project managers especially in implementing multi-sectoral IAD projects. This goes to show that although the budget request process is to a certain extent integrated, the budget release process is still sectoral (through line agencies). Project implementation is therefore highly dependent on the capability of line agencies at different levels to manage the process. This usually does not augur well for synchronization.

It is not the intention of the evaluation team to suggest an entirely different release process for integrated area development, nor is it the intention to suggest an alternative cash management system for IAD projects. It is our concern that for the IAD approach to be effectively implemented, a certain degree of flexibility is required in the budget process to deal with the priorities enumerated by PD 1348. It is in achieving this flexibility that the Council, with the membership of the Budget Ministry, can fully exercise its role.

E. Structure of the Council

Having given the four areas of intervention where the Council has relevance for the program level, it now seems proper to identify how the Council can adapt itself organizationally to the demands of the IAD approach. As mentioned earlier, beyond its linkages with a cabinet coordinator, the Council does not have a direct, formal contact with existing IAD's.

The only structure below the council level is a technical staff divided into two major divisions for project management and project development. The Project Development Division concerns itself with the formulation of the Integrated Framework Plan for both on-going and future IAD's. The Project Management Division on the other hand is mandated primarily to design and implement monitoring and evaluation systems for all on-going IAD's.

Coming to the question of generating relevant policies which institutionalize the IAD approach, we can identify several approaches that may be utilized. Undoubtedly the Council, given its high level composition, cannot spend the time to formulate policies or deliberate on operational issues. The existence of a technical staff capable of performing policy studies may provide part of the solution. But there are other ways by which policies may be generated--specialized workshops and conferences, contracted studies, intermittent evaluation studies and the work of ad hoc or standing committees.

There are ideas on what studies, conferences or committees the NACIAD should sponsor or operationalize, but one committee in particular attracts the interest of the evaluation team - the Management Committee.

Under the old structure of the CCG-IRD, the Management Committee discussed issues and arrived at policy recommendations which enhanced the development of the general IAD approach. We cannot overemphasized the need for the reactivation of that type of committee at this point in time.

It is suggested that a Management Committee be established under the NACIAD composed of the deputy or assistant ministers or assistant secretaries of the member agencies and the program directors of all on-going major integrated projects or programs. It would likely be chaired by the chief operating officer of the Council.

Such a composition would (1) allow for more flexibility in terms of frequency of meetings, (2) provide the proper forum for discussing operational issues that cannot be ordinarily resolved at the program level, (3) provide the forum for formulating or reviewing the policy measures addressed to these operational issues, before reaching the council, and (4) provide assistance to the Council in coordination work at the national level.

The Management Committee could also be used as the body that would organize and give sanction to multi-sectoral, interagency ad hoc teams that would look into specific problems of IAD implementation.

The Management Committee would discuss problems elevated by the Program Office through the following channels: a program director, a deputy minister or assistant minister representing the member line agencies of the Council, the consolidated "Special Action Report" and "Exception Reports" of a program office through the NACIAD technical staff.

So as not to overburden the committee with problems to be acted upon, a program office should take special care in screening those items which could be solved at its own level. In addition, the technical staff of NACIAD, as the secretariat of the Management Committee, could prepare the agenda by screening various items in view of three criteria. Of highest priority would be problems common to two or more IAD's. A second concern would be those problems interagency in nature. Finally, problems peculiar to one IAD but urgent in nature would be considered.

GENERAL LAND USE
CAMARINES SUR/ALBAY[3/]

Land Use [1/]	Area in Hectares [2/]	%
Coconut	262,846	34.0
Cogon Grass/Brush	111,494	14.4
Rice Land	116,599	15.1
Annual Crops	70,344	9.1
Logged over forest	67,039	8.7
Ipil-ipil	62,404	8.0
Unproductive	30,993	4.0
Virgin	24,534	3.2
Mangrove	6,360	.8
National Park	4,646	.6
Lake	3,215	.4
Sugar	2,274	.3
Fishponds	1,171	.2
Diversified	595	.1
Orchard	235	.1
TOTAL	773,481	100%

1/ Land use classification based on dominant pattern of land use in the area as seen on photographs.
Not field checked - subject to change over time.
Land use area less than 9 hectares not reflected in the maps.

2/ Computation by planimeter and squre grid.

3/ Source: Land use maps BRBDP- Program Area by Land Use Planning Project through aerial photography & aerial photo interpretation of:
a. Bicol River Basin/Bu. of Soils AP 1976-1977
b. BFD aerial photography - 1970
c. BFD Forest Resources Condition Survey - 1969-1970

BICOL PROGRAM IMPLEMENTATION PLAN AND ACCOMPLISHMENT

A Summary Bicol River Basin Development Program "Implementation Plan" document was prepared by the BRBDPO in April 1978 and submitted to USAID through NEDA, to fulfill one of three conditions precedent to disbursement of AID funds under the technical assistance, Bicol Integrated Rural Development Project (Bicol ORD).[1/] The other conditions were submission of an "Evaluation Plan" which is discussed in another section of this report and a statement indicating the names of authorized GOP representatives for the IRD project. All conditions were fulfilled on schedule.

In the context of the purpose level statement in the joint Bicol IRD Project Paper (492-0303) and the subsequent Grant Agreement (No. 78-19), the BRBDP Implementation Plan indicated that "initial program activities resulted in the generation of capital funding for three on-going major projects." These were the Libmanan-Cabusao IAD I, the Bicol Secondary and Feeder Roads and the Bula-Minalabac IAD II projects, all assisted by AID. Further, "the BRBDP Cabinet Coordinator and Program Office" had earlier identified nine (9) additional high priority projects with immediate investment potential. These projects were scheduled for feasibility analysis, documentation/packaging, funding, and implementation start-up within five years[2/] (p. 7 and figure 1). The GOP plan indicated "the target is a minimum of five major projects financed and in implementation." Identified projects and status to date are:

1. Integrated Health, Nutrition and Population (AID 1979)

2. Upgrading of Agricultural Colleges (AID 1979/80)[3/]

3. Rinconada IAD III - Buhi/Lalo (AID 1979)

4. Rinconada - Bato/Baao (ADB Phase I Loan 1979)

5. Naga-Calabanga (IAD IV) (ADB Phase I Loan 1979)

6. Baliwag-San Vicente (IAD V)

7. Quinali (IAD VI)

8. Sorsogon (Irosin Valley) (SIDA II)

9. Others

Beyond the three projects under implementation as of April 1978, the equivalent of five projects (1-5 above) will be funded and implementation started within 1979 (physical work in 1980). As a planning and investment

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1/ Section 4.1. Bicol IRD Project Grant Agreement No. 492-0303.

2/ From date of the plan, this would be April 1983. The IRD Grant Agreement specified five additional major projects funded and in implementation by 1981.

3/ Camarines Sur Agricultural College will be upgraded under a (non-BRBDP) GOP and USAID grant technical assistance project. The initial identification analysis and justification, however, related to BRBDP efforts. This is also related to the Bicol Agricultural Research Complex including a training center on campus. This is also supported under an AID loan. Early planning was cooperatively carried out with the Bicol Program.

level objective, the minimum target of five projects will have been achieved ahead of schedule. (Table I summarizes BRBDP assistance projects to date). The special studies and analyses for these projects began as early as 1976. Two additional projects, Baliwag-San Vicente (IAD V) and Quinale (IAD VI) are the subjects of on-going GOP feasibility studies, and a draft Bicol Roads II project package has been prepared for preliminary review. No hard dates for scheduled funding (or donors) and implementation have been set.

In retrospect, the target figures were derived, in part, after examining the extensive number of "studies" undertaken prior to the Bicol IRD grant and trying to relate these to the high overhead costs of the Bicol Program Office and trickle of discrete investment projects coming out of the BRBDPO pipeline. This concern resulted in the marked shift in emphasis (although USAID inputs were similar) from the prior AID grant assistance project.[1/] The purpose of the earlier project was to create the "organizational structure and institutional capability" required to plan and implement integrated component project. The revised purpose of the Bicol IRD project focused on IAD or other component projects actually funded and in actual implementation. (Other objectives are discussed on page 1 of Attachment F.) An assumption was that the institutional capability of the BRBDPO and cooperating line agencies would continue to develop in the process of planning, implementation and monitoring/evaluation of these projects. In fact, several of the better trained and experienced BRBDPO personnel have moved to other programs. As some of these personnel are now working in other IAD programs in the Philippines, their movement contributed to the Bicol program's spread effects.

1/ Bicol River Basin Development Project, 1974-1977, No. 492-260.

On-going and Proposed Projects Assisted by External Donors
Bicol River Basin Development Program

			Duration CYs	Obligations FYs	$ Million 2/ Donor	GOP
I	AID ASSISTANCE					
	Grant Technical Assistance Projects					
	- Bicol River Basin Development		74-78	74-77	2.2	4.3
	- Bicol Integrated Rural Development		78-82	78-81	2.3	8.6
	- Ag Research I (Bicol Agricultural Research Complex 1/		75-80	75	0.7	1.5 (est)
	- Ag Outreach (upgrade C.S. Ag College) 1/		79-82	79-81	0.4	1.5 (est)
	Consulting Services (Sub-Loans)					
	- Bicol River Basin Comprehensive Water Resources Dev. Prefeasibility Study		77-76	-	0.6	0.4
	- Rinconada IAD III Feasibility Study		77-78	-	0.5	0.5
	Development Loan Projects	No.				
	- Libmanan IAD I	0275	76-80	75	3.5	5.0
	- Bicol Secondary & Feeder Roads	0281	77-81	76	10.0	30.0
	- Bula IAD II	0310	78-82	78	3.0	3.8
	- Rinconada IAD III 1/ Buhi-Lalo Component	0289	79-85	79 (3.5) 80 (1.5) Total	5.0	3.5
	- Bicol Integrated Health, Nutrition & Population	0319	79-84	79	2.5	2.5
	Subtotal				30.7	61.6
II	ADB PHASE I PROJECT ASSISTANCE (est.) 2/		79-85	79	47	35
	- Rinconada (Bato/Baao) Component (IAD III)					
	- Naga-Calabanga Component (IAD IVa)					
III	OTHER PROPOSED PROJECTS (est.) 3/					
	- Baliwag-San Vicente (IAD V)	(GOP feasibility study underway)			15	15
	- Quinali IAD (VII)	(" " " ")			10	14
	- Sorsogon-Irosin Valley IAD	-			9	10
	- Bicol Roads II	(being packaged/reviewed)			15	20
	Subtotal				49	59
	TOTAL				126.7	155.6

1/ Non-BRBDP, but functionally related.
2/ Includes an estimated $6 million from European Economic Community. Estimated ADB loan signing October 1979.
3/ Costs and proportions by GOP and donor subject to change with study results and negotiations.

BICOL INTEGRATED RURAL DEVELOPMENT PROJECT--IMPLEMENTATION[1/]

A. Focus of Technical Assistance

As described in the Joint Grant Agreement, "This technical assistance project provides essential contract services, participant training, and commodities to support planning, implementation, and evaluation of the expanded and accelerated Bicol Program. The Project is consistent with and will help implement Presidential Decree 926 and help achieve the objectives of approved Bicol Program operational year plans beginning in 1978. More specifically, the Project will provide a mix of A.I.D. technical assistance resources[2/] focusing on:

(1) identification, design, feasibility analysis and documentation of major Bicol development projects with the objective to secure financing from both external donors and Government of the Philippines source;

(2) activities to promote accelerated private sector investment in agribusiness and rural-based industry in the Bicol Region;

(3) line department implementation, and BRBDPO monitoring of Bicol component projects, particularly those assisted by A.I.D. loans and grants;

(4) evaluation of the broader Bicol River Basin Development Program over time, and periodic evaluation of specific Bicol component projects, particularly those assisted by A.I.D. loans and grants;

(5) activities to further strengthen (a) the technical and management capabilities of Bicol Program multi-agency staff, and (b) the Bicol Program organizational structure to increasingly involve beneficiaries in the development process;

(6) selected other sector initiatives in support of the overall Bicol Program and Bicol regional development; e.g., social services projects focusing on the rural poor, applied research on rural savings mobilization, rural housing, sea farming, etc.;

(7) activities to help apply replicable Bicol Program methodology to other economically depressed areas of the Philippines, through the National Economic Development Authority ("NEDA") and the National Council on Integrated Area Development ("NACIAD")."[3/]

1/ Accrued expenditures from the prior grant Bicol River Basin Development Project (492-260) FY1974-77 continued into 1979. Availability of these committed resources (e.g., PIO/P for delayed training at AIT/Bangkok) necessitated postponement of some Bicol IAD Project procurement.

2/ This may be supplemented by other projects or programs supported by USAID/Philippines and AID/W; for example, Consulting Services sub-loans for feasibility studies if appropriate, Provincial Development Assistance Project (PDAP), Cooperative Marketing, Real Property Tax Administration, and other projects.

3/ Joint Grant Project Agreement 492-0303, Annex 1 p. 3-4.

B. Inputs

The Project Agreement was signed March 10, 1978 (FY 78 input) and amended December 22, 1978 (FY 79 input) providing a total of $1,477,000. Of this, a total of $802,800 has been or is in the process of being earmarked (sub-obligated) for procurement of goods and services (see Table 1). A summary of inputs includes:

U.S. Contract Services	$429,000
Filipino Contract Services/Grants	103,200
Participant Training	60,400
Commodities	210,200
	$802,800

It is estimated that $1,050,000 will be earmarked by the end of FY 1979 (9/30/79) and $1,300,000 by January 1980. Obligation of the FY 1980 increment of $520,000 is scheduled in the first quarter and will bring the total to $1,997,000.

The 1977 joint evaluation recommended that if qualified Filipino consultants were available they should be contracted. A definite shift was made in that direction. Several highly-skilled Filipino professionals have been contracted through BRBDPO administered contracts. Combining U.S. and Filipino consultants on an equal professional. basis has been most productive.

C. Outputs

The key outputs relate to Bicol component projects identified, feasibility analysis and design work completed. The projected magnitude of packages completed was five or more between 1977 and 1980. In fact, five have been completed and two are underway (the latter are IAD feasibility studies with GOP resources only). A comprehensive Bicol multipurpose survey was carried out, and a portion of the analysis is underway. Several proposed small studies relating to project implementation have yet to be carried out.

Ten preliminary GOP funded agro-industrial feasibility studies have been completed. However, emphasis is being shifted from less cost effective investment studies to promotion activities. Another output is completion of annual evaluations of three on-going Bicol projects assisted by AID loans ($16.5 million) and the this biennial evaluation. In addition, U.S. direct hire project staff have been responsible for monitoring loan project implementation and providing advisory inputs. Two Bicol Program technicians are in training and ten are scheduled to depart (U.S. and 3rd country). In most cases, output targets are being met.

D. Purpose Level Achievement

Of the Project Paper purpose level statements, the key purpose is "to secure major financing from external donors and domestic sources and physically begin implementation of eight or more socially and economically feasible integrated development projects in the Bicol from

1977 to 1981." Although other benefits are expected to accure to the Bicol Program through technical assistance (strengthened capability, etc.) and indirectly to the rural poor who are the targeted beneficiaries of the resulting development loan projects, the key indicator is new investment projects in implementation. Because of the extensive basic studies completed over the first four years of the Program, it was clear the highest priority for joint GOP-U.S. resources had to be given to activities directly leading to packaging and funding high quality, feasible projects rather than studies on a shelf. Other "important" studies took second priority. Based on the listing of proposed projects in the 1978 GOP Bicol Program Implementation plan (see Attachment E), two component "projects" have now been funded by joint GOP-AID loan agreements. An additional grant component project, the Agricultural Education Outreach Project which provides for the upgrading of Camarines Sur Agricultural College, was signed in August 1979, and the ADB is expected to sign a $47 million loan for a combined IAD project package (IAD III & IV) in October 1979. In addition, the latter packaging phase of Bula IAD II project supported by an AID loan benefited from the provision of technical assistance from this Bicol IRD project. Measured against the projected target, the purpose has been achieved to date.

The second purpose statement reads: "To increase private sector agribusiness and rural manufacturing investments in the Bicol." This has not been met and likely will not be met in a measurable way through 1981. Attempts are being made to collect baseline data and do analysis on the number and types of enterprises in the Bicol. Experience suggests there is some indirect generation of new and expanded business development as accelerated rural development occurs. Direct generation is more likely with adequate government incentives, information and promotion activities, rather than the feasibility study approach. The Bicol Program is revising its focus and targets in this area.

E. Goal - Sub-goal

The stated goals and sub-goals, restated from GOP objectives are still valid. They are reflected in the stated objectives of component IAD and integrated sectoral projects (see Attachment E).

Summary Conclusion

Overall, the joint Bicol Integrated Rural Development Project (Bicol IRD) is successfully providing selected U.S. and Filipino technical consultants, participant training in the U.S. and in third countries, and a moderate level of essential commodities. The emphasis, however, is shifting from project planning/packaging to technical assistance related to support for (a) effective implementation and operations of five on-going Bicol projects, assisted by AID loans, (b) agribusiness and rural industry promotion, and (c) special emphasis on project monitoring and evaluation. Efforts are also planned to further facilitate the spread effects of replicable methodology from the Bicol Program to other IAD efforts in the Philippines. In this regard, assistance may be provided to and through NEDA and NACIAD. In the course of implementing the grant project, the capability of the Bicol Program staff is expected to be further strengthened.

The Project Paper (1976) is still valid, although the areas of focus have shifted somewhat. The project Grant Agreement, with updated financial plans, is accurate. It will be further updated by the FY 1980 amendment adding incremental funding. Based on the clear requirement for grant technical assistance, and effectiveness of implementation to date, it is recommended that the 1980 funding be provided as scheduled.

Further, it is recommended a follow-on biennial evaluation be carried out in mid-1981 as scheduled.

Table 1.

Bicol Integrated Rural Development Project (492-0303)
Funds Earmarked (or in Process)/Budgeted as of July 31, 1979

I. TECHNICAL SERVICES

A. Technical Services - U.S.	PIO/T	Dollar Earmarked PIO/T1/ (Budgeted)2/	Status
1. Organ. Dev. Consultants	80067	25,000 (46,000)	completed
2. MIS Consultant	80103	14,000	completed
3. Proj. Planning/Ag. Econ.	80103	47,000 (84,000)	on-going
4. Water Resources Engr.3/	80066	77,000	on-going
5. Agribusiness/Rural Industry	80153	60,000	on-going
6. Agro-forestation Consultant	80151	46,000	on-going
7. Host Country Contract Spec.	80148	(20,000)	de-obligated
8. Health Planner/Trainer3/	80136	6,000 (36,000)	completed pending
9. Survey Analyst	80197	24,000	on-going
10. IAD I & II Evaluation Team	80222	36,000	on-going (1979-80)
11. Bicol Biennial Evaluation Team	80229	44,000	on-going (1979 & 81)
12. Bicol Roads Evaluation Team	80255	10,000	Jul-Aug. 79 (1979-80)
13. Groundwater Hydrologist	(JPIL in process)	30,000	1979-80
14. Engineering Design Consultancy (Rinconada IAD III) HC - firm	(in process)	(40,000)	Nov. 79-80
15. Water Management Consultant	(in process)	(120,000)	Jan. 80-82
		$429,000	

1/ Amounts budgeted in Financial Plan and earmarked (obligated), but not expended under a contract may be de-earmarked or retained in the PIO/T for similar, follow-on contract services.

2/ Budgeted in current grant agreement financial plan (JPIL 3) or updated in PIO/T.

3/ Intermittent service in man-months.

Technical Services Program Support	JPIL	Dollar Earmarked JPIL (Budgeted)[1/]	Status
A. Senior Filipino Consultants			
1. Civil Engineer - Bicol Roads Project	1	14,400	on-going
2. Spatial Planner (AID/W DS/UD follow up)	2	5,000	on-going
3. Contract/Financial Specialist	4	8,000	on-going
4. Evaluation/Management Spec.	7	5,000 (9,600)	on-going
5. Business Intelligence System	8	9,600	recruitment underway
6. Bicol Biennial Evaluation (Rural Sociologist/Regional Development Economist)	9	7,200	on-going
		49,200	
B. Program Grant Support			
1. Agro-forestation/Watershed Dev. (Start-up Program 1979-80)	5	15,000 (20,000)	on-going
2. Bicol Multipurpose Survey (Field work/computer tapes IPC)	PIO/T 80143	25,000[2/]	completed
3. Bicol Multipurpose Survey Analysis (UPLB/GIRD and others	6	24,000	on-going
		44,000	
C. Total A and B		103,200	

1/ Budgeted in current grant agreement financial plan (JPIL 3) or updated in subsequent JPIL.

2/ Plus $100,000 from prior Bicol grant project.

II. PARTICIPANT TRAINING	PIO/P	Dollar Earmarked PIO/C	Status
1. Regional Planning (M.S., U.S.) (Reynaldo de Sagun/BRBDPO)	80094	(13,200)	cancelled deobligated
2. Agribusiness/Rural Industry (M.S., U.S.) (Antonio Santiago/BRBDPO)	80095	(13,200)	cancelled deobligated
3. Water Resources Development (12 mo. M.S. - AIT Bangkok) (Perfecto Loria/NIA)	80217	6,500	Apr 79-Apr 80
4. Water Resources Development (1.5 mo. - U. of Arizona) (Ramon Palomares/NIA)	80230	4,500	Jun-Jul 79
5. Water Resources/Transport Dev. (8 mo. Diploma - AIT Bangkok) (Cesar Paita - Transport) (Francisco Autor - Water Res.) (Henry Paua - Water Res.)		20,000	Aug 79-Apr 80
6. River Basin - Regional Dev. (7 BRBDP officials)	90021	29,400	Oct 79-Nov. 79
		60,400	
III. COMMODITIES	PIO/C		
1. Excess Lt. cargo truck, 1½ ton, 3 ea (NIA-Rinconada)	80215	3,000	underway
2. Crew cab pickups, 20 (for participating line agencies)	80216	03,000	underway
3. Shop maintenance equipment (BRBDPO Vehicles)	90007	3,300	underway
4. Replacement tires (not available in Philippines)	90114	900	underway
		210,200	
IV. TOTAL EARMARKED (OR IN PROCESS)		802,800	
Total Grant Agreement to Date (FY 78-79)		1,477,000	
Estimated to be Earmarked by 9/30/79		1,100,000	

Attachment G

RESUMES

JOINT BICOL EVALUATION TEAM MEMBERS

U.S. Evaluation Team Members:

Dr. Thomas F. Weaver - Ph.D. in Agricultural Development, Cornell University; M.S. in Agricultural Micro-meteorology, Cornell University; and B.S. in Agronomy, Pennsylvania State University, Dr. Weaver is currently a Professor at the University of Rhode Island. He was formerly with the Agricultural Development Council of New York at the University of Malaya. He has conducted numerous research projects in Asia, Central America and the rural areas of the United States. He is the co-author of a book on rural development and has published scholarly monographs and articles on development-related topics.

Dr. Gerald C. Wheelock - Ph.D. in Rural Sociology, Cornell University; M.S. in Rural Sociology, B.S. in Animal Sciences at Iowa State University; Professor of Rural Sociology at Alabama A&M University, and Center Associate for the Southern Rural Development Center. Research Associate at the University of the Philippines, Los Banos and Cornell University. Provincial Agricultural Liaison of the Agricultural Development Office in Vientiane, Laos. Instructor, Sabah Agricultural Training Center. He has authored several published articles on agricultural credit institutions in the Philippines, comparative studies of agricultural institutional development and U.S. rural development programs.

Dr. James A. Roumasset - Ph.D. in Economics, University of Wisconsin. He is currently completing his assignment as the Philippine representative of the Agricultural Development Council. He will be returning shortly to the Economics Department, University of Hawaii, where he is associate professor and concurrently visiting adjunct research associate at the East-West Resource Systems Institute. He has spent five years in the Philippines conducting research on agricultural development. His publications include Rice and Risk and several articles on public policy and agricultural development. His specialties are farmer decision-making, agricultural contracts, and the theory of agricultural development.

G.O.P. Evaluation Team Members:

Dr. Gelia T. Castillo - Ph.D. in Rural Sociology, Cornell University; M.S. in Rural Sociology, Pennsylvania State University; and A.B. in Psychology, University of the Philippines. Dr. Castillo is currently Professor of Rural Sociology, University of the Philippines at Los Banos. She has authored two books and published numerous articles on rural development here and abroad.

Mr. Joaquin P. Cortez - M.S. in Urban and Regional Planning, University of the Philippines; and B.A. in Economics, Ateneo de Manila University. Mr. Cortez is currently a Program Officer/ Project Coordinator associated with the Philippine Center for Advanced Studies. He formerly worked with the National Economic and Development Authority Region IV. He has been involved in numerous projects like the Palawan Comprehensive Development Planning Project, the National Coordinating Council for Town Planning Housing and Zoning, the proposed Quezon Canal Project and the Metro Manila Transport-Land Use and Development Planning Project. He has served as consultant to the Asian Development Bank and Spaceconsult Philippines.

Mr. Rolando G. Tungpalan - A.B. Economics, University of the Philippines. Mr. Tungpalan is currently Staff Economist, Project Economic Staff, National Economic and Development Authority (NEDA). He serves as Project Coordinator for two inter-agency post-evaluation studies: the Tarlac-Lingayen and the Dagupan-Urdaneta Roads Project (IBRD) and the Angat River Irrigation Project (ADB), and is a committee member on the Development Planning Code of the Philippines.

Mr. Danilo S. Alcantara - A.B. in Mass Communication, Institute of Mass Communications, University of the Philippines. Mr. Alcantara is currently working as Senior Management Analyst of the Program Management Division of the National Council on Integrated Area Development. He formerly worked with the Development Academy of the Philippines as project officer of the Integrated Area Development Program, Foreign Service Institute and the Philippine Youth and Sports Development Program.